THE MACMILLAN COMPANY
NEW YORK · BOSTON · CHICAGO · DALLAS
ATLANTA · SAN FRANCISCO

MACMILLAN & CO., LIMITED
LONDON · BOMBAY · CALCUTTA
MELBOURNE

THE MACMILLAN CO. OF CANADA, LTD.
TORONTO

MODERN CURRENCY REFORMS

A HISTORY AND DISCUSSION OF RECENT CURRENCY REFORMS IN INDIA, PORTO RICO, PHILIPPINE ISLANDS, STRAITS SETTLEMENTS AND MEXICO

BY

EDWIN WALTER KEMMERER, PH.D.

PROFESSOR OF ECONOMICS AND FINANCE IN PRINCETON UNIVERSITY, FORMERLY FINANCIAL ADVISER TO THE UNITED STATES GOVERNMENT IN THE PHILIPPINE ISLANDS WITH PARTICULAR REFERENCE TO THE ESTABLISHMENT OF A GOLD-STANDARD CURRENCY

New York
THE MACMILLAN COMPANY
1916

Set up and electrotyped. Published December, 1916.

Norwood Press
J. S. Cushing Co. — Berwick & Smith Co.
Norwood, Mass., U.S.A.

TO

MY FORMER TEACHER AND COLLEAGUE

JEREMIAH WHIPPLE JENKS

WHO FIRST DIRECTED MY INTEREST TO THE FIELD

OF MODERN CURRENCY REFORMS

PREFACE

The student of economics often expresses regret that his science does not submit itself to the laboratory method of investigation which has proven so fruitful in the natural sciences. His phenomena are too complex and too closely related to human welfare to permit of their reduction to simple elements and of the bringing together of these elements into different combinations so as to study the varying results. The facts of economic science must be studied in the complex forms in which they develop, and their development is usually slow. Such is particularly the case in monetary science, and one of the results is that this science is shot through and through with controversial problems.

The nearest approach the economist has to the laboratory method in studying monetary problems is through the study of modern currency reforms. Here the phenomena are deliberately manipulated; entire currency systems of long years standing, upon which the business and the credit of millions of people have been based, systems in which prejudice and custom have wrought their work, are entirely transformed in a short period — a few years or perhaps only a few months. A silver standard, as in Mexico, or a fiduciary standard, as in Porto Rico, is transformed into a gold standard; a fiduciary standard, as in the Philippine Islands, is transformed into a gold-exchange standard. The unit of value in which prices, wages, and taxes have been expressed, and debts contracted, is slowly raised by a deliberately planned contraction in the relative

money supply, as in India; is quickly raised by relative contraction, as in the Straits Settlements; is carried up by a rising silver market, as in Mexico; or is forced to give way suddenly to an absolutely new unit of value, as in Porto Rico. These changes are carried through in a short time, and their effects are writ large — effects in prices, taxes, wages, in debts contracted in the old currency and henceforth payable in the new, in foreign trade, and in public credit.

It is hoped that the discussion of these currency reforms which follows will throw light on fundamental monetary principles, and will afford lessons of value, both by example and by warning, to the countries of Asia and Latin America, which are expected soon to undertake thoroughgoing reforms of their currency systems.

Each of the five countries whose currency reforms are studied had a different problem, and the experience of each offers its own lessons; it is none the less true, however, that in a number of respects the problems and experiences were similar. Inasmuch as some readers will not be interested in all five of the essays, it has seemed best to make each a unit in itself. To this end, in the interest of clarity, some repetition has been necessary. It is hoped, however, that, through the rather liberal use of cross references, the amount has been kept down to the minimum consistent with clearness.

The material of this book has been in process of collection and preparation by the author for a period covering thirteen years, nearly three of which he spent as a government official in countries whose currency reforms are described. In that time he has received assistance from many persons to whom the limits of a brief preface prevent individual acknowledgment, notably government officials, bankers, and business men of Manila, San Juan (Porto Rico), Singapore, and the City of Mexico. It is a pleasure to acknowledge specifically and with gratitude valuable assistance from Mr. Edmund Enright, Assistant Secretary of

the Interior, Porto Rico; Frank A. Branagan, formerly Treasurer of the Philippine Islands; Henry C. Ide, formerly Secretary of Finance and Justice of the Philippine Islands; J. O. Anthonisz, formerly Treasurer of the Straits Settlements, whose recent book on the Straits Settlements currency reform came to the author's attention after the present essay on that subject was in the hands of the printer; John Anderson, formerly Governor of the Straits Settlements; Jeremiah W. Jenks, Professor of Government in New York University; James W. Beardsley, Chief Engineer, Porto Rican Irrigation Service; José Limantour, formerly Finance Minister of Mexico; Clarence R. Edwards, formerly Chief of the Bureau of Insular Affairs, War Department; and Frank R. MacIntyre, at present Chief of the Bureau of Insular Affairs. Valuable assistance in the reading of manuscript was rendered by my colleagues in the Department of Economics and Social Institutions in Princeton University, David A. McCabe, Walter M. Adriance, and Arthur N. Young. Last but not least I wish to express my gratitude to my former student and present colleague, Neil Carothers, for most helpful and painstaking assistance in the reading of proof.

PRINCETON UNIVERSITY,
October 19, 1916.

CONTENTS

PART I

THE INDIAN CURRENCY REFORM

CHAPTER I

CHAPTER II

CHAPTER III

PART III

THE PHILIPPINE CURRENCY REFORM

CHAPTER V

APPENDIX A

APPENDIX B

PART I

THE INDIAN CURRENCY REFORM

MODERN CURRENCY REFORMS

CHAPTER I

Indian Monetary History Prior to 1892

Aside from the discontinuance of bimetallism by France and the other states of the Latin Union in the early seventies of the last century, no recent currency reform has aroused such widespread interest and keen controversy among economists as that of India. Although India is "different" from occidental countries, and her problems often appear remote, none the less few chapters in monetary history are more illuminating to the principles of monetary science than this Indian experience. The literature on the subject is voluminous; scarcely a year passes that does not produce several books on Indian currency. Since 1892 the subject has been investigated by three governmental commissions and each has issued an elaborate report, while, to the inquiring student, the magazine literature seems to be limitless. Despite this great amount of material, however, there is nowhere available an account of the reform that is at once brief, comprehensive, and scientific.[1] And yet this is the type of treatment for such a subject that most American readers desire. This essay is an attempt to meet the needs of such American readers, and to furnish a background for the study of

[1] The nearest approach to such an account is one by A. Piatt Andrew on Indian Currency Problems of the Last Century, in The Quarterly Journal of Economics, XV, 1901, pp. 483–516. This article, however, covers only about half of the period of the reform.

subsequent currency reforms in other countries — reforms in which the governmental authorities have often drawn heavily upon the lessons of Indian experience.

Coinage History Prior to 1892

The earliest monetary system of India[1] which can be traced was based upon weights of fine metal, silver, gold, or copper, preference being given to silver.

"The unit of weight was the *rati* (1.75 grs. troy), which was the seed of the . . . 'wild liquorice.' A hundred *ratis* . . . formed the . . . *sataraktika*, a weight of fine metal which . . . has developed into the rupee of the British Government. . . . From the standard weight of 100 *ratis* originated in 1542 the *rūpyam* (or *silver* coin) of Sher Shah, weighing some 176 grs., soon to be followed by a multitude of local rupees, each with its own weight and fineness. The earliest English rupee was the 'Rupee of Bombaim' of 1677, weighing 167.8 grs. But it was not till the establishment of British rule in 1758 that British rupees were largely coined."[2]

A Bengal regulation of 1793 mentions no less than 27 varieties of rupees as current in the several districts.[3] While silver was the most widely used standard over India, gold coins also circulated at varying rates, and appear to have been the principal currency in Madras.[4] At intervals gold coins in different provinces were made legal tender, but the circulation of these coins was usually at market valuations based upon the price of bullion. Although the East India Company as early as 1806 had declared its intention to put an end to the losses and inconveniences

[1] The material of this early history has been taken chiefly from Robert Chalmers, A History of Currency in the British Colonies, pp. 336–348.

[2] Ibid., pp. 336–337.

[3] Ibid., p. 337 and note.

[4] Ibid., pp. 340–343.

arising from the "circulation of so many denominations of gold and silver coins of different values in different districts [by establishing] one general system for the formation of the coin for the currency of the whole of our possessions on the Continent of Asia," [1] it was not until 1835 that one uniform silver rupee was made the standard throughout British India. The type of rupee chosen both as to weight and fineness was the Madras rupee of 1818. This rupee had had its gross weight of 180 grains based upon that of one of the earlier rupees, and its fineness of 11/12 based upon that of English gold coins, which a report of a Committee of Council of 1803 on the London Mint considered "would be equally proper for silver coin." [2] From the Act (No. XVII) of 1835 to the present time, the weight and fineness of the rupee has remained unaltered; although in 1862 (Act No. XIII) the name of the coin was changed from "Company's rupee" to "the government rupee," and the East India Company's coat of arms gave place to the Queen's effigy as the emblem on the coin.

Other silver coins are the half-rupee, quarter-rupee or 4-anna piece, and eighth-rupee or 2-anna piece. All of these fractional pieces are of the same fineness as the rupee and of proportionate weights. The rupee and half-rupee are unlimited legal tender, while the other silver coins are legal tender only for fractions of a rupee. Down to June 26, 1893, the Indian mints were open for the free coinage of silver when offered in sums of not less than 1000 *tolas*.[3] The coinage charges were 2 per cent for silver 11/12 fine, in addition to .1 per cent for melting.[4]

The Act of 1835 declared that "no gold coin shall hence-

[1] Cf. Chalmers, ibid., p. 338.

[2] Ibid., p. 338 and note.

[3] A *tola* is 180 grains of silver, 11/12 fine, or 165 grains of pure silver with 15 grains of alloy — the exact content of a rupee.

[4] A refining charge was also made when the silver was lower than 11/12 fine or otherwise unfit for coinage.

forward be a legal tender for payment in any of the territories of the East India Company." It none the less authorized the coinage of a gold piece known as the *mohur*, of the same weight and fineness as the rupee, which was to circulate at its bullion value. For the period from 1800 to 1835 Frederick C. Harrison estimated that Indian gold coins to the amount of 3.8 million ounces of fine gold were minted in England.[1] These coins were chiefly in units known as the *pagoda* [2] (worth about $1.81) which circulated in southern India, and the mohur (worth approximately 15 rupees or about $7.10) which circulated more widely.

Efforts to Introduce Gold into Circulation. After 1835 efforts were frequently made to introduce gold into circulation; and as early as 1841 government treasuries were authorized to receive gold mohurs at the rate of 15 rupees to the mohur. The new mohurs, however, were not popular, and by 1847 gold formed no part of the currency. Then followed the gold discoveries of California and Australia, and the resulting decline in the value of gold relative to silver. Gold flowed into India in large quantities, and by 1852 some five million rupees worth of gold had piled up in the government treasuries. Not finding these gold coins acceptable for public expenditure, the Government issued a Notification (December 22, 1852) that beginning with the new year "no gold coin will be received on account of payments due, or in any way to be made, to the Government in any public treasury within the territories of the East India Company." [3]

Gold might still be brought to the mints for coinage. It did not depreciate to the extent feared, and soon there appeared many proposals for the extended use of gold in India's circulation.[4] One widely favored proposal was for the

[1] Cf. Chalmers, p. 343.
[2] Ibid., p. 342.
[3] Ibid., p. 344.
[4] Russell, Henry B., International Monetary Conferences, etc., pp. 31–32.

circulation of the British sovereign as the equivalent of ten rupees, with a 20-rupee legal tender limit. In November 1864 the Government of India issued a Notification making sovereigns and half-sovereigns receivable at government treasuries at the rate of 10 rupees to the sovereign, and authorizing the treasuries to pay them out to any person willing to receive them in payment of claims against the Government. The Calcutta Chamber of Commerce in 1866 recommended the adoption of a gold currency; and in the same year the Mansfield Commission made its Report[1] advising the Government, in view of the general wish of the country, to cause a legal tender of gold to be a part of the currency arrangements of India. In accordance with the recommendations of the Commission, and in expectation of the early introduction of gold as a legal tender in India, the Government, on the 28th of October, 1868, issued a Notification that British and Australian sovereigns and half-sovereigns should thenceforward be "received in all the treasuries of British India and its dependencies, in payment of sums due to the Government, as the equivalent of 10 rupees 4 annas, and 5 rupees 2 annas, respectively; and that such sovereigns shall, whenever available to any government treasury, be paid at the same rates to any persons willing to receive them in payment of claims against the Government."[2] The gold mohurs of 1835 were to be received in like manner at the rate of 15 rupees to the mohur. Shortly after this action was taken, however, the states of the Latin Union closed their mints to the free coinage of silver, and the silver price of gold began its long and pronounced upward move, with the result that gold practically disappeared from circulation in India.

Agitation for Currency Reform. This breakdown in the comparatively fixed ratio that had so long existed between the values of gold and silver, and the subsequent

[1] House of Commons Papers, No. 148 of 1866. See also Chalmers, pp. 344–345.

[2] Chalmers, p. 345.

instability in India of English exchange and exchange on other gold standard countries, caused serious disturbances in India's foreign trade, and added greatly to her burdens in the meeting of her gold obligations. Beginning about 1873, therefore, there was a twenty-year period of agitation for currency reform in India. This period has been divided into three parts by Dr. H. R. Read in an unpublished dissertation on *The Development of a Qualified Gold Exchange Standard in India*.[1] They are: (1) 1873 to 1878, a period characterized by dissatisfaction with the silver standard, and agitation for reform directed chiefly toward proposals for the closing of the Indian mints to the free coinage of silver, usually with the idea of sooner or later placing the country upon a gold standard. (2) 1878 to the calling of the International Monetary Conference at Brussels in 1892, a period in which the hopes for currency reform in India in the minds of her leading statesmen rested upon the securing of an international agreement for bimetallism. In probably no other country of the world was the judgment of leading men so favorable to international bimetallism as in India. (3) From the calling of the Brussels Conference in 1892 to the closing of the Indian mints in June 1893, a period when, largely as a result of English hostility to bimetallism, all hope of securing an international bimetallic agreement was lost.

Paper Currency in India to 1892

Before discussing the events immediately leading to the closing of the Indian mints, it will be well to describe briefly India's paper currency system, since this system played an important rôle in the country's subsequent monetary history.

The banks of India had been denied the privilege of bank-

[1] The dissertation was written in 1913 and is deposited in the Cornell University Library. See pp. 32–33.

note issue since 1861.[1] At that time the Indian Government assumed a monopoly of the right to issue paper money — a monopoly which it has since retained. The Indian notes are based upon a plan fundamentally like that of the Bank of England notes under the Peel Act of 1844, the chief difference being that they are issued by a government department, instead of by an issue department of a bank.[2] There is a fixed amount of notes issued against securities. This "fiduciary circulation" was originally fixed at 40 million rupees but had been raised from time to time, until on March 31, 1893, it stood at 80 million.[3] All other notes were required to be supported by silver or gold coin or bullion.[4] For the purposes of the paper currency India was divided into "circles," at that time eight in number. The notes were legal tender only in the "circle" for which they were issued, and as a rule were convertible into rupees only at the office of issue, and (except in the case of British Burma) at the principal city of the Presidency to which the "circle" of issue belonged.[5] Inas-

[1] Prior to 1861 the banks of Bengal, Madras, and Bombay had the right of issue.

[2] The original Act establishing the government paper currency was Act No. XIX of 1861. It was amended from time to time, and codified in Act XX of 1882 which was the main act in force in 1893. Chalmers, pp. 346–347.

[3] Report of the Committee Appointed to Inquire into the Indian Currency, London, (C. 7060), 1893, known by the name of its chairman, Lord Herschell, and hereafter cited as "Herschell Committee Report," sec. 71.

[4] They were issuable on demand in exchange for (*a*) current silver coins of India at par; (*b*) silver bullion or foreign silver coins on the basis of 165 grains of pure silver to the rupee plus a charge of 2.1 per cent to cover coining and melting expenses; (*c*) a limited amount of gold bullion at rates to be fixed by the government from time to time; (*d*) notes of other denominations of the same "circle." Chalmers, p. 346.

[5] Herschell Com. Rep., sec. 71. Writing in 1891 Mr. F. C. Harrison said: "There are at present eight issuing circles, which as a rule only cash their own notes, an exception being made in favor of travellers, and also on those occasions when the encashment of foreign circle notes suits the interests of Government. It has always been considered impracticable to have one note changeable throughout the country. Notes of large denominations [— the denominations varied from 5 rupees to 10 thousand

much as the law did not state where the note reserves should be located, it was the policy of the Government to shift the funds in the note reserve from district to district, and from treasury to treasury, through debits and credits, so as to count surplus silver accumulations in whatever government treasuries located as part of the Paper Currency Reserve, and to release for more active services of Government the silver which had accumulated as note reserve in places where coin was in stronger demand.[1]

At the end of March 1893, the total circulation of government notes was in round numbers R. 264 millions against which there were held R. 175 millions in coin, R. 8.7 millions in bullion, and R. 80 millions in securities.[2] This note circulation was equivalent to about one fifth of the metallic circulation of India, exclusive of the coin held in the Paper Currency Reserve.[3]

rupees —] are commonly employed for remittance purposes, and the result of cashing them freely would be a constant shifting of government funds at considerable expense in order to discharge them." The Economic Journal, I, 1891, p. 726. Cf. infra, pp. 135–136.

[1] Harrison, ibid., p. 727.

[2] Herschell Com. Rep., sec. 71.

[3] Cf. estimates of circulation of India made by F. C. Harrison, later accountant general of Madras, in The Economic Journal, I, 1891, pp. 721–751; II, 1892, pp. 257–279; and IV, 1893, pp. 262–269; also F. Y. Edgeworth's criticisms of Harrison's method and calculations in Econ. Jour., II, 1892, pp. 162–169; and IV, 1894, pp. 109–113.

CHAPTER II

HERSCHELL COMMITTEE INVESTIGATION AND REPORT

BEFORE the convening of the International Monetary Conference at Brussels in 1892 the opinion became widespread in India that the efforts to be made in the Conference to secure an international bimetallic agreement would be as futile as had been those of the international conferences of 1878 and 1881. On February 18, 1892, eight months before the Brussels Conference convened, the Bengal Chamber of Commerce declared that it was "impossible for men of business to feel any confidence in the future value of the rupee," and that they believed that this state of things restricted the investment of capital in the country and seriously hampered legitimate enterprise. The Chamber said that if an international bimetallic agreement should prove unattainable, it saw nothing

"but the prospect of endless fluctuations in the relative values of silver and gold, attended with a fall in the value of silver of indefinite amount; and the Committee [of the Chamber of Commerce] think that in such case the Government of India should take steps to have the question of the advisability of introducing a gold standard into India carefully and seriously considered by competent authorities." [1]

In a despatch of March 23, 1892, the Government of India, although urging the Secretary of State to support any proposals that might be made by the United States or any other country for the settlement of the silver question by

[1] Cf. Report of the Committee Appointed to Inquire into the Indian Currency (Cd. 9390), 1899, sec. 11. Hereafter cited under name of the chairman of the Committee, Henry H. Fowler, as "Fowler Com. Rep."

international agreement, said that it seemed probable that, failing an international agreement, the United States would be forced to stop the purchase and coinage of silver.[1] They accordingly requested the British Government, in view of this contingency, to take under consideration the question whether any measures, and if so, what measures, could be adopted for the protection of Indian interests.[2] Three months later (June 21), the Government of India declared it to be its

"deliberate opinion that, if it becomes evident that the International Conference is unlikely to arrive at a satisfactory conclusion, and if a direct agreement between India and The United States is found to be unattainable, the Government of India should at once close its mints to the free coinage of silver and make arrangements for the introduction of a gold standard."[3]

The Brussels Monetary Conference suspended its labors December 17 without having accomplished anything definite in the line of an international agreement, under a resolution to meet again May 30, 1893, "should the Governments approve."[4] But the Conference did not reconvene. Shortly after it suspended its labors the Government of India telegraphed in further detail its proposals to the Secretary of State:

[1] An important factor in the Indian situation at this time was the fact that the United States, under the provisions of the Sherman Silver Purchase Act of 1890, was compelled to buy 4,500,000 ounces of silver every month, in payment for which it issued "treasury notes." These purchases for a time artificially buoyed up the price of silver, but the accumulation of silver was becoming dangerously large, and the silver market was in a precarious condition because of the agitation for the repeal of this Act and the further danger that much of this accumulated silver might be thrown upon the market.

[2] Fowler Com. Rep., sec. 11.

[3] Ibid., sec. 11.

[4] International Monetary Conference held at Brussels, 1892, Report of the Commissioners on behalf of the United States, and Journal of the Sessions of November 22, 1892 to December 17, 1892, p. 359.

"Our proposal is that we shall take power to issue a notification declaring that English gold coins shall be legal tender in India at a rate of not less than 13⅓ rupees for one sovereign [*i.e.*, 18*d*. per rupee]. . . . An interval of time, of which the length cannot be determined beforehand, should, we think, elapse between the mints being closed and any attempt being made to coin gold in India. The power to admit sovereigns as legal tender might be of use as a measure *ad interim*, but it need not be put into force except in case of necessity." [1]

On October 21, 1892, a month before the Brussels Monetary Conference convened, the Government of India's proposal of June 21 was referred by the Secretary of State for India to a committee of seven members of which Lord Herschell was made chairman, with instructions to consider the proposals of the Government of India and to advise whether it was expedient for the Home Government to allow them to be carried into effect.

The Committee held 12 hearings at the India Office in London between October 27, 1892 and February 2, 1893, and examined 28 witnesses. With one exception all the witnesses were Europeans, 16 of them had had business or governmental experience in India or Ceylon, while 3 others were connected with English business houses carrying on trade with India. Of the 25 witnesses who expressed themselves regarding Indian conditions,[2] 13 were opposed to India's going over to the gold standard, and 12 were favorable to such action. There was no appreciable attempt to secure the opinion of natives of India either through testimony taken in India or written communication.

Into an analysis and summary of this testimony the limits of a brief account of the Indian currency reform do not permit us to go. It will be sufficient here to sum-

[1] Telegram of Jan. 22, 1893, Fowler Com. Rep., sec. 11.

[2] One spoke only concerning the currency experience of the United States; one, concerning that of Brazil; and one, that of Java.

marize briefly the conclusions which the Committee drew from the testimony, to give a statement of the supporting reasons, to describe the reform plan recommended, and to consider the chief arguments advanced by the supporters of the plan and by its opponents.

The chief defects of the Indian currency system the Herschell Committee found to be:

I. Financial burdens and inconveniences imposed upon the Indian Government by the falling rates of exchange with gold standard countries.

II. Evil effects of the fall of exchange upon the people of India through its influence on Indian commerce.

III. Hardships caused by the fall in exchange upon Europeans in official and business life in India, *i.e.*, persons whose salaries and wages were paid in silver but whose remittances home were made upon a gold basis.

Let us consider these three alleged defects of the Indian currency system in the order named.

I. Financial Burdens and Inconveniences Imposed upon the Indian Government

By far the most powerful influence leading to the discontinuance of the silver standard in India was the financial burden which that system imposed upon the Indian fisc. Every year India had heavy payments to make in England — the so-called "home charges." These payments were on a gold basis,[1] and most of them were comparatively fixed. They covered such items as interest and annuities on the gold debt, salaries, pensions, and leave of absence allowances of employees in the Indian service working in England or employees who had returned to England from India and were there paid on a gold basis, purchases of

[1] A small amount of the public debt expressed in rupees and therefore on a silver basis was held in England — how much the evidence does not show. Cf. Herschell Com. Rep., Evidence, Qs. 2227–29.

supplies in England for the Indian service, and other expenses incurred for Indian governmental establishments. The total of these home charges for 1892 was computed at £16 millions sterling.[1] From 1872–73 to 1892–93 the net annual disbursements of the Indian Government in England (excluding payments for the discharge of debts and all capital transactions) varied between £13.3 millions and £16.8 millions.[2]

The gold value of the rupee as measured by the average exchange rate in London on India for the fiscal year 1872–73 was 22.75*d.*, which meant that it cost India in that year approximately R. 10.55 to lay down a pound sterling in London; in 1892–93 the average sterling value of the rupee was 14.98*d.*,[3] which meant that it cost India approximately R. 16.02 to lay down a pound sterling in London — an increase of 52 per cent in 20 years.

But this was not all the story. Not only had the gold value of silver declined rapidly and almost continuously since 1873, but there was every prospect that there would be a greater decline in the near future. Repeated efforts to secure an international bimetallic agreement had failed, and hope for relief in that direction was rapidly passing into despair. Moreover, the threatened panic in the United States arising in large part from the pumping into the circu-

[1] "The home charges" were itemized as follows for 1892 by Mr. F. C. Harrison: figures are in millions of pounds.

Interest on debt and railroad redemption annuities	£8.0
Salaries and establishments out of, but debitable to, India	0.6
Annual charges exclusive of stores, pensions, and leave allowances	1.0
Pensions	3.8
Leave allowances	0.6
Stores and materials	2.0
Total	16.0

Silver in India, Econ. Jour., II, 1892, p. 653.

[2] For tabular statement of these home charges by years 1850–51 to 1892–93 see Fowler Com. Rep., App. II, Table No. 9, p. 138.

[3] Ibid., p. 136.

lation of several million dollars of "treasury notes" each year in payment for the 4,500,000 ounces of silver required to be purchased monthly by the Sherman Silver Purchase Act — an amount equal to about one third of the world's monthly production of silver — was likely at any moment to lead to the repeal of that Act. This might possibly be followed by an actual dumping upon the silver market of the large mass of silver bullion accumulated in the United States treasury.[1]

The financial burdens and the uncertainties in constructing the annual budgets which this situation created were serious. According to the Herschell Committee Report, there were remitted to England in the year 1892–93 £16.5 millions, which at the average rate of exchange in that year, viz. 14.985*d*., required a payment of R. 264.8 millions.[2] If this could have been remitted at the exchange rate of 1873–74, it would have required but R. 177.5 millions. Because of changes in the price and wage levels in England, interest rates, etc., the whole of this difference of R. 87.3 millions could not properly be regarded as a loss to the Government of India arising from the difference in exchange.

"It is certain, however," said the Herschell Committee, "that India had actually to remit in 1892–93 upwards of Rx. 8,700,000 more than if the exchange had been at its former point.[3] At an estimated exchange 1*s*. 4*d*. per rupee for the past year, a surplus of revenue over expenditures was shown of Rx. 146,600; the exchange having fallen to

[1] In the Brussels Conference of 1892 this situation was felt to be very serious, even by the opponents of bimetallism. Alfred D. Rothschild, delegate of Great Britain, said: "Gentlemen, I need hardly remind you that the stock of silver in the world is estimated at some thousands of millions, and if this Conference were to break up without arriving at any definite result there would be a depreciation in the value of that commodity which it would be frightful to contemplate and out of which a monetary panic would ensue, the far-spreading effects of which it would be impossible to foretell." Int. Mon. Conf. Rep., 1892, pp. 72–73.

[2] Herschell Com. Rep., sec. 3.

[3] "Rx." is a symbol commonly used in India to refer to tens of rupees.

an average of rather less than 1*s.* 3*d.*, this surplus has been converted into an estimated deficit of Rx. 1,081,900, notwithstanding the improvement of the revenue by Rx. 1,653,300 over the budget estimate. Nor is this all. The Government are compelled to contemplate a further fall, the effect of which cannot be forecast."[1]

Sir David Barbour, Financial Member of the Council of the Viceroy of India from 1888 to 1893, said in a published statement:

"The immediate cause of our financial difficulties, and the cause which, by comparison and for the time being, dwarfs all others, is the fall in the gold value of silver, which . . . has added to the Indian expenditure in two years more than four crores of rupees.[2] . . . Our financial position for the coming year is at the mercy of exchange, and of those who have it in their power to affect in any way the price of silver. If we budget for the present deficit of Rx. 1,595,100, and exchange rises one penny, we shall have a surplus; if it falls a penny, we shall have a deficit of more than three crores; if we impose taxation to the extent of one and a half crores of rupees, a turn of the wheel may require us to impose further taxation of not less magnitude; another return, and we may find that no taxation at all was required."[3]

Depreciation of Silver or Appreciation of Gold? An adequate understanding of the situation will require at this point a brief consideration of the time-honored question as to whether this great decline in the Indian exchange rates from 1872–93 to 1892–93 was due primarily to a depreciation in the value of silver or to an appreciation in the value of gold. In the year 1872–73 the average gold value of a rupee was approximately 23*d.*; conversely, the

[1] Herschell Com. Rep., secs. 3–5.
[2] A crore is 10 million. It is equal to 100 lakhs, a lakh being 100,000.
[3] Quoted in Herschell Com. Rep., sec. 5.

MOVEMENTS IN VALUE OF GOLD AND SILVER, 1873–1893

YEAR	Value in United Kingdom as Measured by Purchasing Power over Commodities (Average for 1873 = 100)[1]		Gold Value of Silver. (Average for 1873 = 100)	Value of Rupee in India as Measured by Purchasing Power over Commodities[3]	Value of Silver in China as Measured by Purchasing Power over Commodities[4]
	Index Numbers		Index Numbers	Index Numbers	Index Numbers
	Gold[1]	*Silver*[2]			
1873	100	100	100	100	[100]
1874	109	107	98	92	92
1875	116	111	96	103	89
1876	117	104	89	100	83
1877	118	109	92	77	91
1878	128	113	89	72	87
1879	134	116	86	79	83
1880	126	111	88	91	88
1881	131	114	87	101	84
1882	132	115	87	102	85
1883	135	115	85	101	89
1884	146	125	85	93	88
1885	154	127	82	94	88
1886	161	123	77	97	86
1887	163	123	75	96	88
1888	159	115	72	90	92
1889	154	111	72	85	88
1890	154	124	80	85	88
1891	154	117	76	84	88
1892	163	110	67	76	85
1893	163	98	60	78	84

[1] The index numbers for the value of gold are the reciprocals of the Sauerbeck index numbers for the wholesale prices in the United Kingdom of from 43 to 45 commodities. Figures have been adjusted by dividing by a constant so that the number for the year 1873 will be 100, thereby making each succeeding figure show the percentage change since 1873.

[2] The average gold value of an ounce of British standard silver in London, in 1873, according to the Pixley and Abell tables, was $59\frac{1}{4}d$. Taking this as 100 and multiplying the index number in the preceding column showing the relative purchasing power of gold over commodities, by the figure showing the percentage decrease or increase in the gold value of silver each year, we arrive at a figure showing the relative purchasing power of silver bullion over commodities for that year. For example, the average price of silver in 1874 was $58\frac{5}{16}d.$ per ounce; the gold index number for 1874, viz. 109, would be multiplied by $\frac{58\frac{5}{16}}{59\frac{1}{4}}$ or .984 to obtain the silver value index number for 1874, that is, 107.5.

[3] Reciprocals of Atkinson index numbers for Indian prices.

[4] Reciprocals for index numbers for prices in Shanghai, as given by Irving

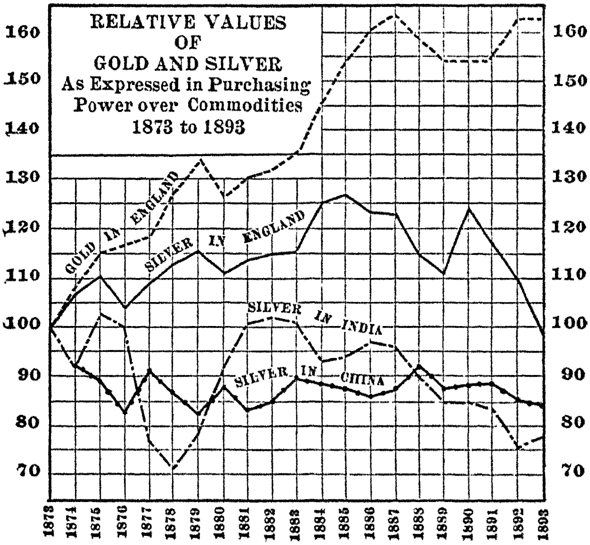
average silver value of a pound sterling was 10.4 rupees. Twenty years later the average gold value of the rupee was approximately 15*d.*, and the average silver value of a pound sterling was about 16 rupees. To the people in England it appeared as if the value of silver had fallen by about 35 per cent; to the people in India it looked as if the value of gold had risen by about 54 per cent. Did silver depreciate or did gold appreciate, or did both movements take place?

The value of gold is best expressed by its purchasing power, not over one commodity like silver, but over a large group of commodities; likewise the value of silver is best expressed by its purchasing power, not over gold alone, but over a large group of commodities. By this test the evidence seems conclusive that, regardless of causes and regardless of subsequent events, for the greater part of the period 1872–73 to 1892–93, the decline in the gold price of silver was chiefly an expression of an appreciation of gold, not of a depreciation of silver. The character of the evidence supporting this conclusion may be seen from the preceding table and the following chart, showing the movement of the value of gold as expressed in its purchasing power over commodities in England, and that of the value of silver as expressed in its purchasing power over commodities in England, India, and Shanghai, respectively.

Of the four curves that of gold was clearly the most unstable, while that representing the value of silver in Shanghai was the most stable. Silver in England, instead of declining in value, actually moved upward during most of the period — doubtless being buoyed up artificially during much of the time by the heavy purchases of silver by the

Fisher, in The Rate of Interest, App. xxx, p. 426. They are based upon 20 inland commodities, 17 articles of export and 15 foodstuffs. Inasmuch as the figures begin with 1874 as 100, and as the purchasing power of silver in India fell 8 per cent from 1873 to 1874, I have assumed the same decline for China, calling the 1874 figure 92 instead of 100, and reducing all the others proportionately, thereby making the column comparable with the others.

American Government under the Bland-Allison Act and later under the Sherman Silver Purchase Act. Its apparent decline in England down to 1890 was due to the fact that



the price of silver bullion was always stated in terms of the rapidly appreciating gold money of the country. In India the value of the rupee as measured by its purchasing power over commodities [1] varied much less widely than did that of the pound sterling in England — and this is particularly true if one eliminates, as it is reasonable to do, the heavy drop in the value of the rupee (*i.e.*, rise in rupee prices) during the period of the great Indian famine of 1877–79. While the value of the rupee in India was by no

[1] The Atkinson index numbers for India are based on prices of thirty-eight native commodities gathered from representative parts of India, and weighted roughly according to the relative importance of the respective commodities. Cf. Jour. Royal Stat. Soc., LX, 1897, pp. 84–124; and LXXII, 1909, pp. 496–573; also U. S. Bur. of Labor Statistics, Bulletin No. 173, 1915, pp. 276–282.

means stable, and while from 1887 to 1893 it was less stable than was the pound sterling in England, none the less, taking the period as a whole, the rupee varied much less widely in its value than did the pound. For the pound the extreme range of the index numbers was 63 points (100–163); while for the rupee it was but 31 points (103–72). Ignoring the worst famine year, *i.e.* 1878, the range for the rupee was but 27 points (103–76).[1] The standard coefficient of dispersion for the fluctuations in the value of the pound (1873–93) was .137, and that for the fluctuations in the value of the rupee was .106.

We may conclude therefore that from 1873 to 1893 the increase in India's home charges were in the main not nominal but real, since the unit in which her fixed obligations were expressed had been increasing rapidly in size.[1] She was like a merchant who had agreed to deliver, over a long period of years, in return for a lump sum payment, a certain number of yards of cloth of a given kind annually and who unexpectedly found that the yardstick was increasing in size three to four per cent a year.[2]

This analogy, like most analogies, is not entirely accurate. The rupee did depreciate during the latter years of the period, while gold during those years was comparatively stable. Furthermore, many of the supplies India was buy-

[1] Another series of price index numbers for India was prepared by Sir James Wilson in connection with a paper he read before the East India Association in London in 1911. It covered: (1) eleven imported articles, including iron, coffee, cotton goods, sugar, kerosene, and salt; and (2) seven food grains at selected stations throughout India. For the period 1861–90 by decades the index numbers for certain groups of commodities were:

YEARS	11 IMPT. ARTS.	7 FOOD GRAINS
1861–70	111	115
1871–80	90	117
1881–90	84	107

Cf. [London] Economist, July 15, 1911, p. 123.

[2] Inasmuch as the purchasing power of the rupee in India fell somewhat, particularly during the years 1887 to 1892, a small part of the increase in the home charges may be looked upon as nominal.

ing in gold standard countries were being bought at declining gold prices as gold depreciated. The following extract from the testimony of Mr. Frank Forbes Adams, an English merchant who had lived in India seventeen years, suggests certain offsetting factors that were not adequately allowed for in most of the official statements emanating from India:

"The loss on the home charges has largely increased, and yet, in that connection, I should like to say that it seems to me that usually the amount of loss to the Government in official statements and otherwise is very much exaggerated. For instance, in the Blue-book, the statistical abstract of British India, . . . they take every loan as if it had been raised on the equivalent of 10 rupees to the £1, that is, 2*s*. exchange, whereas very few loans indeed have been raised at such a high rate as that. A great many of them have been raised at varying rates from 1*s*. 11*d*. to 1*s*. 9*d*. down to 1*s*. 7*d*.; that is, one point. Sometimes the loss on the annual amount spent by the Government in stores in this country is added, whereas, as a matter of fact, it is a very ordinary transaction, where you buy the stores at the gold price and draw for them at the price you have paid at the exchange of the day. There is no actual loss to government. They have the advantage of a fall in the gold price. Then another point . . . is, that many of those loans were presumably raised in England, because the rate of interest was lower in England at the time than in India; and therefore, where annually the Government of India, against the loss by exchange in remitting their home charges, have a gain in interest as compared with what they would have been paying in rupees had they raised the money originally in rupees, they should set that against it as a deduction."[1]

[1] Herschell Com. Rep., Evidence, Q. 1894.

II. Evil Effects of the Fall of Exchange through Influence on Indian Commerce

The second evil of the Indian currency system in 1893, and one emphasized by the Herschell Committee, was the harmful influence of a falling and fluctuating exchange upon India's foreign trade, particularly her import trade. India's exchange rates with silver standard countries were naturally comparatively constant, the normal range being determined by the "silver points," the counterparts of the "gold points" in exchange between gold standard countries. But the great bulk of India's foreign trade was with gold standard countries. This trade was subject to all the evils of an unstable and widely varying exchange. For the year 1891–92 India's total merchandise imports and exports (exclusive of treasure and government stores) amounted to R. 1,746 millions, of which 74 per cent was with gold standard countries and 26 per cent with silver standard countries. For 1890–91 the percentages were 73 and 27 respectively.[1] The average annual amounts and the percentages of India's total merchandise exports going to gold-using and silver-using countries respectively for the period 1875–76 to 1891–92 were as follows:[2]

Fiscal Years	Gold-Using Countries		Silver-Using Countries	
	Per Cent	Av. Ann. Amt. R. 000,000	Per Cent	Av. Ann. Amt. R. 000,000
1875–76 to 1879–80	62	389	38	235
1880–81 to 1884–85	69	564	31	258
1885–86 to 1889–90	68	632	32	294
1890–91 to 1891–92	67	702	33	339

During the later years, it will be observed, the amount of export trade both to gold standard countries and to

[1] Herschell Com. Rep., App. II, p. 243. [2] Ibid., p. 242.

silver standard countries was increasing but the proportions were not materially changing.[1]

Declining Exchange and India's Export Trade. There was a widespread, though not uncontroverted, opinion that the decline in exchange rates was stimulating the export trade with gold standard countries. India's exports to gold standard countries were largely raw products, the chief of which were cotton, rice, seeds, wheat, jute, tea, and indigo.[2] The gold prices of some of these articles, as, for example, rice, jute, and indigo, had not fallen from 1873 to 1892 as rapidly nor proportionately to the fall in the gold value of the rupee,[3] and the result was that Indian exporters obtained increasing numbers of rupees for their bills of exchange drawn against given quantities of these articles exported. Inasmuch as local wages, and local prices of supplies during the greater part of the period 1873–93, had been fairly constant, the production costs of these commodities had not materially increased. The result was that certain lines of trade were artificially stimulated by the declining exchange[4] — a subject to be discussed in some detail later in this volume.[5]

[1] Figures for imports from gold standard countries and from silver standard countries respectively are not available for the above period. During each of the two years 1890–91 and 1891–92 the merchandise imports from silver standard countries were about one third of the merchandise exports to silver standard countries. The chief silver standard country with which India traded was China, and this trade was triangular, England representing the third point. "China consigns a large portion of her produce to England, and the proceeds are remitted back to India in discharge of the indebtedness of China to India." Ibid., Q. 2566, also pp. 242–243.

[2] Cf. Statistical Abstract relating to British India, 1888–89 to 1897–98, London, 1899, p. 229.

[3] Cf. Fowler Com. Rep., App. II., pp. 144 and 160.

[4] The most striking illustration of this principle which the writer has seen is the one cited by Mr. Moreton Frewen from the experience of Hakodate, the great northern island of Japan. It was reported to the British Foreign Office by the British Consul General at Hakodate. "In 1892, Hakodate advertised for tenders for 1,500 tons of water-pipes and the contract was

[5] Cf. infra, pp. 492–495.

An illustration of the principle is found in the Ceylon tea industry down to about 1891. In Ceylon the Indian rupee circulated as in India, and tea was Ceylon's chief article of export. From 1880 to 1885 the gold price of Ceylon tea in England steadily rose, while the gold value of the rupee declined slightly, with the result that Ceylon tea dealers received increasing amounts of gold for each pound of tea and increasing numbers of rupees for each sovereign obtained for the tea. After 1885 the gold price of tea in London declined, but not so rapidly as the gold price of the rupee.[1] The result was that the tea merchants and producers were receiving increasing rupee prices for their tea. Wages and other expenses of tea production in Ceylon were nearly constant. Were India and Ceylon to go to a gold standard, it was claimed, they would lose this advantage, and be handicapped in their competition with silver standard countries like China and Japan for the sale of tea in the markets of gold standard countries.[2]

The weight of opinion among merchants familiar with

secured by a British firm, the tender being four guineas a ton. . . . At the price of silver four guineas cost Hakodate 28 silver dollars. In 1893 there came the greatest fall in the price of silver, the fall of last year [1908] only excepted. In 1894, Hakodate again advertised for 1,500 tons of pipes to complete her water system. The same English firm tendered, and this time at four sovereigns per ton. But because of the great fall in exchange it now required $40 [silver] to buy four sovereigns, or in other words, it required 40 per cent more of Hakodate's silver money to buy 5 per cent less of our gold money. Under these altered conditions Hakodate refused all the tenders; she erected her own iron works, and when last heard from was busy exporting her pipes to China and India." Moreton Frewen, Silver and our Trade with Asia, an address published by the Canadian Branch of the Fair Exchange League, Ottawa, Canada, P. O. Box 393.

---

[1] For the entire period 1880–92 the gold price of Ceylon tea fell 9½ per cent while sterling exchange rates fell 24½ per cent. There was a substantial drop in the gold price of tea 1892–94.

[2] Cf. testimony of H. K. Rutherford, Chairman of the Ceylon Tea Plantations Company, before the Herschell Committee; also letter of Thomas North Christie; and figures and chart. Herschell Com. Rep., pp. 109–113 and App. II, pp. 221–223.

the Indian export trade was strongly in support of the claim that the declining exchange had stimulated Indian exports. One of the most capable witnesses before the Herschell Committee, Mr. Stephen A. Ralli of the firm of Messrs. Ralli Brothers, which had carried on a large import and export trade with India, declared in answer to the question: "Do you think that the decline in silver has increased production in India?" "I do not think there can be two opinions upon that point; that is an evident thing. No man who has any practical experience of India and of the export trade, of the business in the interior, can have any doubt whatever that the decline in silver and the decline in exchange have materially conduced to the great development of the export trade."[1]

Unfortunately, data are not available that are both sufficiently comprehensive in scope and extensive in time, during the period of India's silver standard, to afford for India a satisfactory test of this claim.[2]

Even if declining exchange did stimulate somewhat India's export trade in certain commodities, this did not mean that in its final result the stimulus to the export trade was necessarily a good thing for India. At best it was but temporary and irregular in its action. Furthermore, if falling exchange stimulated exports, it probably also inhibited imports,[3] as the rupee was having a continually decreasing purchasing power over gold while rupee wages in India were remaining fairly constant,[4] and the gold prices of many commodities which were being imported from gold

[1] Herschell Com. Rep., Evidence, Q. 1499.

[2] It is interesting to note that the Japanese Coinage Investigation Commission in its Report of 1896 maintained that falling exchange rates increase exports in silver standard countries; and that the Mexican Monetary Commission in its report of seven years later, after a careful study, came to the same conclusion for Mexico. Cf. Matsukata Masayoshi, Report on the Adoption of the Gold Standard in Japan, Tokyo, 1899, p. 162. For a discussion of the subject in connection with Mexico see infra, pp. 492–495.

[3] For a discussion of this subject see infra, pp. 495–496.

[4] Cf. Herschell Com. Rep., App. II, p. 272.

standard countries were not falling proportionably to the gold price of silver and to the rise in Indian exchange. The Herschell Committee, therefore, in considering the immediate stimulus of the declining exchange to the export trade, was doubtless correct in maintaining that any such tendency, if it existed, was not to be given much weight in formulating a permanent monetary program for India.[1]

In justice to the advocates of a continuance of the silver standard in India, however, it must be admitted that during the period just prior to the Herschell Committee report, India's import trade with gold standard countries suffered less from the falling exchange than would normally be the case, and less than other silver standard countries suffered a few years later when silver experienced its pronounced decline in value not only as compared with gold but also as compared with commodities in general. This was true because the gold prices of many of the chief commodities which India was importing fell rapidly between 1873 and 1893 — so rapidly that in many instances there was little or no increase in rupee prices. For example, prominent among India's nine chief classes of imports in 1892–93 were the following articles: cotton manufactures, sugar, iron, mineral oils, and copper.[2] While the sterling exchange value of the rupee fell 34 per cent from 1872–73 to 1892–93, the gold prices of cotton manufactures (yarn, thread, and piece goods plain and printed) on the average fell 31 per cent;[3] from 1873 to 1893 the gold price of sugar

[1] Herschell Com. Rep., secs. 27–28.

[2] For list of imports and values, see Statistical Tables for East India, 1899, p. 229.

[3] Cotton yarn fell 47 per cent, cotton thread rose 2 per cent, cotton piece goods (plain) fell 39 per cent, and printed and dyed also 39 per cent, giving an average of 31 per cent. Eliminating the thread, the average of the other three items was 42 per cent. Computations are based upon wholesale export values as given in the British Board of Trade's Price Tables, in House of Commons Sessional Papers, 1903, vol. 68, pp. 46–49 and notes.

(Java) fell 38 per cent;[1] that of iron bar fell 60 per cent;[2] that of petroleum fell 74 per cent;[3] and that of copper fell 53 per cent.[4] Omitting manufactured silk, for which no figures are available, the average decline for the eight groups of commodities mentioned above, representing 60 per cent of the total merchandise imported by sea (exclusive of government supplies), was 46 per cent, or 12 per cent greater than the decline in the gold exchange value of the rupee.

In general, therefore, it may be said that the gold prices of the chief commodities India was buying were declining more rapidly than the gold value of the rupee and that India was probably actually receiving from Europe larger quantities of these goods on the average per rupee as well as per sovereign than she was in 1872–73.[5]

The actual development of the merchandise import and export trade therefore during the twenty years prior to the Herschell Committee's Report had hardly been such as to justify a strong condemnation of the silver standard.

Temporary Oscillations in Exchange. Aside from the broad influence of the decline in exchange upon India's foreign trade with gold standard countries, there was

[1] Sauerbeck index numbers. Jour. Roy. Stat. Soc., XLIX, 1886, pp. 642–647, and LXVI, 1903, pp. 97–102.

[2] Sauerbeck index numbers.

[3] Ibid.

[4] The other four items were "cotton twist and yarn," "railway plant and rolling stock," "machinery and mill work," and "silk manufactures." Cotton yarn, which I have included in the first nine items, fell 47 per cent. There are no general price figures for such goods as railway plant and rolling stock, machinery and mill work, and provisions. But the figures given by the Board of Trade for manufactured iron (Report, op. cit., pp. 23, 26, and 27), which roughly speaking may be taken to typify the first two groups, show an average decline from 1872 to 1892 of 45 per cent, while the Board's index numbers for the group "food and drink" which in a rough way may be taken to typify "provisions" fell 21 per cent (ibid., p. xxxiv). Neither the Sauerbeck nor the Board of Trade tables give figures for silk manufactures.

[5] For a discussion of the general principles governing the influence of changes in the value *per se* of the monetary standard on the prices of various classes of goods, see Kemmerer, Money and Prices, pp. 50–53.

another influence which, though part of the same thing, was sometimes considered separately, *i.e.* the temporary oscillations of exchange. These brought an element of uncertainty in foreign trade transactions which often tended to transform them into a species of gambling. A glance at the chart on page 50 will show how unstable exchange was during the years 1889–93, when variations of 2 to 4 per cent a month were not uncommon. The risks and losses normally incident to such fluctuations, however, could largely be eliminated, though at a small expense, by various devices in common use among the large trading houses, devices such as the making of forward contracts with the exchange banks for the purchase or sale of exchange at rates fixed months in advance,[1] and "hedging" through the forward purchase or sale of silver on the London market so that a loss on exchange would be compensated by a profit on the silver transaction and vice versa.

III. Hardships Caused to Europeans in India by the Fall in Exchange

Another difficulty, analogous to the Government's fiscal difficulties and one which seemed likely to increase them in the future, was the burden which the falling exchange imposed on English officials and employees and upon European employees in commercial houses, who were receiving their wages in rupees but remitting substantial parts of them home either as savings or contributions to their families. The fact that silver prices and wages in India had been fairly constant (except for famine periods) meant that the declining gold value of the rupee did not result in much hardship to these persons as regards local prices and expenses, but the fact that 100 rupees in 1892–93 would buy about 34 per cent less sovereigns than twenty years before was looked upon as a real hardship as regards sending money home

[1] Cf. infra, pp. 297–299, also Herschell Com. Rep., App. II, pp. 227–228.

It is true that home prices had fallen on the average more than proportionately, but this fact was not generally realized by the persons concerned, and it often happened that there had not been much of a decline in the prices of those kinds of things in which these officials and employees were putting many of their sovereigns, such for example as house rents, real estate, the paying off of mortgage indebtedness, and the like. Commenting on this subject the Herschell Committee said:

"It is a matter of dispute how far the fall of prices in this country [England] compensates for the smaller sterling remittance which the same number of rupees will procure; but it is certain that, when due allowance has been made for this, the purchasing power of the incomes of Indian officials has been largely reduced.

"It appears that some European employers have felt themselves bound to make an allowance to the Europeans in their service in India, sufficient to counterbalance, to some extent, the loss which they experience owing to the fall of the rupee;[1] and there can be little doubt that, even in existing circumstances, and still more if the fall of exchange continues, the Government of India cannot turn a deaf ear to the appeals of their servants for similar treatment, without the danger of engendering serious discontent, apart from the question whether such appeals are just and reasonable."[2]

Such were the main points in the Indian currency situation confronting the British Government in 1892. Among them it viewed as by far the most serious the fiscal burdens which the falling exchange was imposing upon the Indian Government and the prospect that they would be greatly increased in the future. This phase of the situation was made more serious by the fact that no satisfactory way could be seen by which to increase the Indian revenues.

[1] For a description of such a plan see infra, p. 262, note[2].

[2] Herschell Com. Rep., secs. 17 and 18.

Obstacles to the Increase of Government Revenues

To increase the import duties would cause a storm of protest at home. By far the largest item of India's imports from England was cotton manufactures, but these were actually falling off at this time (1890–91 to 1892–93), much to the distress of Manchester manufacturers and merchants; and India was not only increasing her own manufactures of cotton goods for home use, but was going into the export market and even competing with Manchester for certain types of trade. To have further handicapped Manchester by an import duty on manufactured cotton,[1] or by an export duty on raw cotton — India's chief item of export — would have been the straw that would break the camel's back for Manchester and a serious political blunder for the dominant political party in England. On the other hand, many of India's internal taxes were burdensome and extremely unpopular, such as the income tax and the salt tax; and, in the existing strained state of Indian public opinion towards England, an increase or extension of these taxes would have threatened increasing discontent and even revolutionary uprisings. The largest single source of government revenue for India was land, but this was essentially a contractual source of revenue and could not be readily increased except at certain periodic settlement dates. Sir Charles Edward Bernard, who had been Secretary to the Government of India in the revenue and financial departments, and was at the time Secretary of the Revenue and Statistics Department of the India Office, testified before the Herschell Committee that nearly one fourth of India's land revenue had been permanently settled by engagement with the Government made nearly a hundred years ago, and could not be touched, and that "the rest of the land revenue is settled for long periods of 30 years, and over a great part of the country the 30 years' settlement has recently been

[1] Cf. ibid., sec. 39.

made."[1] Considering in this way various suggested methods of increasing revenue, the Indian Government found none that afforded a solution of the difficulty, should exchange continue to fall as it offered every prospect of doing.[2]

To meet the difficulty by a reduction of expenditures likewise seemed hopeless. On this point the Herschell Committee said: "Although . . . we feel strongly the necessity for the utmost care in restricting expenditure, we are certainly not in a position to conclude that any economies are possible which would enable the Indian Government to meet successfully the great and growing deficit caused by falling exchange."[3]

Herschell Committee Accepts with Some Modifications Proposals of Indian Government

The Herschell Committee in its report accepted the plan of the Indian Government for the closing of the mint to the free coinage of silver, and for the ultimate adoption of the gold standard, with two modifications. (1) The closing of the mints to the free coinage of silver should be accompanied by an announcement that, though closed to the public, they would be used by the Government for the coinage of rupees in exchange for gold at the rate of 16*d.* to the rupee.[4] This 16*d.* rate was not thought of by the Committee as necessarily a permanent one, but rather as purely tentative, since "circumstances might arise rendering it proper and even necessary to raise the ratio; and the Indian Government might be empowered to alter it with

[1] Herschell Com. Rep., Evidence, Qs. 3160–3255, especially 3212.

[2] Ibid., secs. 35–44.

[3] Herschell Com. Rep., sec. 45.

[4] Ibid., secs. 150 and 151. The Government of India in their telegram of January 22, 1893, had proposed that they be given authority to declare English gold coins legal tender in India at a rate not higher than 18*d.* per rupee. Herschell Com. Rep., App. I, p. 183.

the sanction of the Secretary of State."[1] Many expected that the closing of the mint would lead to a sudden rise in exchange and the rate might go beyond the 16*d.* par — a rate that had been equalled as late as January and February 1892. It was to avoid such a contingency, to prevent the currency supply from being entirely unautomatic and to lighten the blow which the closing of the mints to free coinage would give to the price of silver, that the Committee recommended the modification of Sir David Barbour's plan permitting the Indian Government to issue rupees in exchange for gold at the 16*d.* rate.[2] (2) The other modification was in the nature of an additional provision that at the government treasuries gold would be received in payment of public dues at the same rate. Its object likewise was to prevent disturbances and inconveniences that might arise from a sudden advance in exchange and scarcity of rupees.

Two members of the Committee (T. H. Farrer and R. E. Welby) signed a supplementary note, to the effect that inasmuch as the Committee's proposal contemplated the ultimate adoption of the gold standard with gold in circulation, the Government of India should begin to accumulate a gold reserve so as to be prepared to secure the convertibility of the silver coins.[3]

The Committee's report recommended that a rather free hand be given to the Indian Government in consultation with the Secretary of State as to the details of the reform plan and the time of its inauguration.[4]

Herschell Committee's Recommendations Adopted

The Herschell Committee's Report was submitted to the Secretary of State for India May 31, 1893, and on June 2, a copy of the Report was mailed to the Viceroy of India.

[1] Herschell Com. Rep., sec. 151.
[2] Ibid., sec. 150.
[3] Ibid., pp. 41 and 42.
[4] Ibid., sec. 157.

Five days later a summary of the recommendations was cabled to the Viceroy.[1] On June 15 the Viceroy cabled the Secretary of State that the draft of the Herschell Committee's Report had been received and considered by the Indian Government and met their approval. He requested authority to put the plan into effect at once without further discussion, since "suspense would be injurious,"[2] and it was not likely that any further information comparable with that already before the Secretary of State would be forthcoming from India. In response to this telegram the Secretary of State telegraphed the Viceroy June 20: "Her Majesty's Government have decided to approve the proposals of your Government to close the mints to free coinage and to make arrangements for the adoption of a gold standard, subject to the recommendations made by Lord Herschell's Committee which your Government have accepted. You are therefore empowered forthwith to take the necessary steps."[3]

[1] Correspondence between the Government of India and the Secretary of State, London, 1893, Cd. 7060–7061, p. 14.

[2] Ibid., pp. 14 and 15.

[3] Ibid., p. 15.

CHAPTER III

Raising the Rupee to a Gold Value of 16 Pence

Indian Mints Closed to the Free Coinage of Silver

The Indian Government having secured this authority was not slow in acting. On June 26 it passed Act Number VIII of 1893 to amend the Indian Coinage Act of 1870, and the Indian Paper Currency Act of 1882.[1] The Coinage Act of 1893 provided for the immediate closing of the Indian mints to the free coinage of silver with the proviso that the Indian Government should retain power to coin silver on its own account. Three administrative Notifications[2] were issued on the same date: the first provided for giving rupees in exchange for gold presented at the Indian mints, at the rate of 16*d.* to the rupee; the second authorized the receipt of sovereigns and half sovereigns by the Government in payment of taxes and other government dues at the same rate; and the third provided for the issue of currency-notes in exchange for British coin or gold bullion at the corresponding rate.

In recommending 16*d.* as a tentative rate the Herschell Committee contemplated little more than a recognition of the approximate gold value of the rupee as it had existed during the preceding year or two; the plan proposed was not intended to raise the normal gold value of the rupee, but to prevent it from declining further, and ultimately to stabi-

[1] The Indian Coinage and Mint Act as amended in 1893 is reprinted in full in L. C. Probyn, Indian Coinage and Currency, pp. 96–110.

[2] Notifications are reprinted in full in Probyn, pp. 111–112.

lize it. In their supplementary memorandum Messrs. Farrer and Welby of the Herschell Committee said:

". . . It is to be observed that the step which we recommend will produce the least possible immediate change. Its object is not so much to raise the gold value of the rupee, as to prevent a further fall. It does not materially alter the present relations between debtor and creditor, but, on the contrary, prevents those relations being altered in the future by a further fall."[1]

A glance at the chart on page 50 will show that during the two years preceding the closing of the Indian mints, *i.e.* from July 1891 to June 1893, the sterling value of the rupee ranged from $17\frac{3}{4}d.$ (July 1891) to $14\frac{5}{16}d.$ (March 1893), the mean being almost exactly 16*d.* The average monthly rates of exchange for "council bills"[2] (*i.e.*, the

[1] Herschell Com. Rep., p. 40, sec. 6.

[2] *Indian Council Bills.* Council bills play a very important rôle in India's fiscal, monetary, and commercial life. They are bills on governmental funds in India sold in London by the Secretary of State in Council on Wednesday normally of each week to the highest bidders, provided the bids do not fall below a certain declared minimum. On each Wednesday the Secretary of State has posted at the Bank of England a notice inviting tenders to be submitted on the following Wednesday for bills of exchange and telegraphic transfers on the government of Madras and the government of Bombay. The notice fixes a limit beyond which the total allotments must not go. The Secretary of State does not obligate himself to allot the total amount mentioned in the notice. On the other hand, when the total amount tendered for exceeds the amount offered at the accepted rates allotments are made *pro rata.* During the period from one Wednesday to the next what are known as "intermediates" or "specials" may be sold on the basis of a certain agio over the lowest rate at which allotments had been made on the preceding Wednesday. The chief object of these bills is to provide a means of remitting from India to London the funds needed to meet India's home charges. Often, however, bills are sold by the Secretary of State for other purposes, such as to provide additional facilities for English importers having remittances to make to India, or to transfer funds for monetary as distinguished from fiscal purposes of the Government.

The sale of council bills may be traced back to 1834, although there were some fairly long periods in which no bills were sold, notably the period 1857–1862.

For a full description of council bills, their history, and their functioning, see Memorandum on the Sale of Council Bills and Telegraphic Transfers sub-

averages for the high and low rates for each month) for the two-year period, June 1891 to May 1893 inclusive, was $15\frac{23}{32}d.$ and the average for the two and a half year period, December 1890 to May 1893 inclusive, was $16\frac{3}{32}d.$[1] The minimum rate at which tenders for council bills were accepted for the week ending June 21, 1893, (*i.e.* the week before the week containing the date on which the mints were closed) was $14\frac{29}{32}d.$ It is evident therefore that the 16*d.* rate, although higher than the rates prevailing at the time of closure, was a fairly representative rate, if one took a period of two or two and a half years.

Another advantage of the 16*d.* rate was the ease with which it assimilated the Indian currency system to that of England. At 16*d.* there would be exactly 15 rupees to the sovereign, and this rate of 15 to 1 was the rate at which the gold mohur formerly exchanged for rupees.[2] The rupee contains 16 subsidiary units called annas, therefore one anna would become equivalent to one penny. The anna is equivalent to 4 pice, which would give the pice and the farthing the same value; and finally, the Indian pice was equivalent to three pie, making the pie equal to one third of a farthing. When one considers the close fiscal and commercial ties existing between India and the mother country and the prospect at the time that the sovereign would soon become an important coin in India's monetary system, this close assimilation of the sovereign and the rupee units and their fractions will be seen to be a meritorious feature of the 16*d.* rate.

mitted to the Royal Commission on Indian Finance by F. W. Newmarch, Financial Secretary for India. Royal Commission on Indian Finance and Currency, 1914, (Cd. 7070), pp. 217–233.

[1] Figures were computed from the table of exchange rates given in the Herschell Com. Rep., App. II, p. 254; and from Fowler Com. Rep., App. II, chart facing p. 146.

[2] Cf. supra, p. 6.

How the Plan Worked

Fall in Price of Silver. One of the first results of the closing of the Indian mints — a result that was somewhat discounted in advance — was a striking fall in the price of silver. This is shown graphically in the chart on page 50. During the month of June 1893, silver in London fell from a high point of $38\frac{3}{4}d.$ an ounce to a low one of $30\frac{1}{2}d.$ Silver was quoted in London at $37\frac{1}{2}d.$ on June 24, but on that date rumors became current in London and New York that India contemplated closing her mints; and the white metal began a rapid decline, reaching 36*d.* on the 26th when the definite announcement of India's action was made, and $30\frac{1}{2}d.$ on the 30th. But India's action was not the sole cause of this decline, although her coinage of silver for the fiscal year 1892–93 had been equivalent to 31 per cent of the world's total silver production for the calendar year 1892, and although the psychological effect, upon a highly sensitive market like that of silver, of closing the Indian mints which had offered for years an unlimited demand for silver at a fixed rupee price, was undoubtedly great.[1] The silver situation at this time had become serious in the United States as the result of the heavy silver accumulations in the Treasury, and of the inflation of the currency, arising from the requirement of the Sherman Silver Purchase Act of 1890 that the Secretary of the Treasury should buy 4,500,000 ounces of silver every month, and pay for the same by the issue of "treasury notes." The panic of 1893 in the United States was in full swing during June, and there was a strong movement on foot for the repeal of this silver purchase clause, which was widely looked upon as the chief cause of the panic. The silver market naturally asked what would happen to silver if on top of India's action the United States should suddenly

[1] Cf. E. W. Kemmerer, The Rise in the Price of Silver, etc., in Quart. Jour. Econ., XXVI, 1912, pp. 219–220.

discontinue its policy of purchasing annually about a third of the world's annual silver production, and should begin to dump its enormous accumulations of silver bullion on the market. Congress met in special session August 7, 1893, and after lengthy debate the purchase clause was repealed on November 1. The anticipation of such action by the United States, we have seen,[1] was an important factor in leading India to close her mints. It is also true that the closing of the Indian mints and its depressing effect on the price of silver was repeatedly urged as a reason why the United States Treasury in self-defense should discontinue its heavy purchases of the white metal. A reference to the chart on page 50 will show that, although there were constant fluctuations in the price of silver after the closing of the Indian mints, the low level then reached or a lower one prevailed until India found herself actually on the gold standard.

Temporary Rise in Exchange and Suspension of Sale of Council Bills

Simultaneously with the closing of the Indian mints sterling exchange rates advanced sharply, reaching 16*d*., and then suddenly declined. A brief explanation of the movement will be of assistance in understanding the subsequent course of exchange.

Neither the Herschell Committee nor the Indian Government were at all certain as to what would be the immediate effect of the closing of the mints on the gold value of the rupee. Referring to the Indian Government's proposal for the closing of the mints and for the making of gold coins legal tender at the rate of not less than 13⅓ rupees to the sovereign, the Herschell Committee said:

"It is true that those who think that exchange would not for a considerable time rise at all, and that even the existing

[1] Supra, p. 12.

ratio might not be maintained, may be right in their anticipations. But it must be admitted that on such a point no one can predict with certainty; exchange might rise suddenly and considerably, unless the Government were to interfere actively to prevent it; and the public would not feel any certainty as to the course they would take."[1]

Sir David Barbour, the Financial Member of the Council of the Viceroy of India, who more than any other person was responsible for the reform plan adopted, said in introducing the bill in the Legislative Council:

"It may well be asked whether it will be possible for us to make the gold standard effective at once. . . . To this question I cannot give a confident answer, and I do not believe that it is possible for anyone to do so. . . . It may be that the gold standard can be made effective from the first, although it will not be secure until there is a considerable amount of gold in our treasuries and banks. Or it may be that the making of the gold standard effective will involve a long and arduous struggle, and necessitate heavy sacrifices."[2]

Although it cannot be said that either the Herschell Committee's Report or the statements of the Government of India gave the public any warrant for believing that the closing of the mints would result in an immediate advance in exchange to the 16*d.* par contemplated, nevertheless many influential persons promptly came to the conclusion that such would be the result. As soon as it was known that the mints would be closed and that the gold value of the rupee was to be raised to a maximum of 16*d.*, there began a heavy speculation in rupee paper which forced exchange up rapidly; and the advance itself tended to confirm the belief of those who expected the immediate attainment of a 16*d.* rate. Even the Indian Government became convinced of the soundness of this belief, and, apparently ex-

[1] Herschell Com. Rep., sec. 149.
[2] Cf. [London] Economist, July 29th, 1893, p. 907.

pecting the attainment of the new gold par within a few months,[1] urged the Secretary of State for India not to sell his council bills below a 16*d*. basis. His sales of bills below that rate were vigorously protested by the English Currency Association,[2] and by numerous business men in Calcutta,[3] Bombay and Madras.

For the week of June 21, 1893, just before the mints were closed, the minimum rate at which tenders for council bills had been accepted was $14\frac{29}{32}d$; but the following week some tenders were actually made and accepted at 16*d*. There being practically no demand at this latter rate, and the Secretary of State being in need of funds for home charges, he accepted tenders during the week of July 5 at a rate as low as $15\frac{7}{8}d$. This latter rate he attempted to maintain as a minimum, but the result was that practically no sales were made. Later the Secretary announced that the minimum rate had been reduced to $15\frac{1}{4}d.$, and some cable transfers were sold by him at that rate on August 16.[4] This announcement called forth strong protest from Calcutta, Bombay, and Madras business men.[5] Despite the reduction, however, no considerable amounts of bills were sold, and the reduction was taken by many to be equivalent to an abandonment of the policy of maintaining any minimum rate whatsoever; for the public had no assurance that the new rate in turn would not be lowered. The result was that on January 20, 1894, the Secretary announced

[1] Cf. telegrams passing between Viceroy and Secretary of State on this subject between June 30, 1893, and August 25. Cd. 7253 of 1893, pp. 3–5.

[2] Cf. [London] Economist, Aug. 26, 1893, p. 1026; and [London] Times, July 8, 1893, p. 7.

[3] The Calcutta correspondent of the London Times telegraphed early in July: "The course which the Secretary of State has been following in connection with the sale of council bills is causing general surprise and indignation, and is considered quite incomprehensible. It has severely shaken public confidence, which will not be restored till he announces that 16*d*. is the minimum rate, and that it will be adhered to in future. . . ." Economist, July 8, 1893, pp. 814. Cf. also Cd. 7253 of 1893, p. 4.

[4] Cf. Cd. 9376 of 1899, p. 158.

[5] Cf. Cd. 7253 of 1893, p. 4.

his abandonment of the attempt to maintain "a forced value for his bills," and the first considerable issue of council bills was made on January 31, when a rate of 14⅝*d.* was obtained.[1] The Secretary to the Government of India (Legislative Department) said in the Financial Statement for 1894–95:

"I think it is now recognized that the policy of refusing to issue bills was a mistaken policy, and that it would have been better to issue bills moderately so as to meet the demands on the Home Treasury. But the circumstances we had created were altogether new, and both officials and merchants and bankers had all to learn, by actual experience, what new economic forces had been called into existence, and how they affected the question of the appreciation of the rupee."[2]

Largely as a result of this mistaken policy of trying to suspend by government fiat the law of demand and supply, the total sales of council bills fell from R. 113.4 millions for the last six months of 1892 to R. 11.4 millions for the corresponding period of 1893.[3]

This practical discontinuance of the sale of council bills for a period of nearly six months had a number of serious results, the chief of which, briefly summarized, were as follows:

(1) *Interference with Export Trade.* It interfered with the export trade at a most inopportune time. Any advance in exchange rates in India, we have seen,[4] tends to inhibit the export trade, by lessening the number of rupees the exporter receives for a given amount of foreign or British currency. This sudden and artificial advance in exchange, however, had a greater inhibiting effect on exports than a normal advance would have had because the public were at

[1] East India Financial Statement for 1894–95, p. 12.
[2] Page 12.
[3] Figures cited by Probyn, p. 68 note.
[4] Cf. supra, pp. 24–28.

sea as to how the Government's currency scheme would work, and were doubtful of the Secretary of State's ability to hold exchange at the rate announced. This doubt increased as time went on, and as the Secretary, finding it practically impossible to sell bills at the first minimum rate announced, was forced to announce a second and lower rate. Naturally, exporters in India and importers in England held back for more favorable rates. The Secretary's ability to make his minimum rate effective was further weakened by the fact that the currency reform had been initiated at the most unfavorable time of the year, namely, at the beginning of India's slack season when her exports are smallest. The result was that India's visible trade balance, which is usually "favorable" because of her heavy home charges and her heavy dividend and interest payments on investments of foreign capital, actually became "unfavorable" for a time.[1]

(2) *Heavy Importation of Silver.* India's home charges are in the nature of the price she pays for the "imports of services" which she purchases from the British Government; the council bills are bills of exchange which the British Government, the exporter of these services, in order to secure its remuneration, draws upon the Indian fisc, the importer. The Secretary of State sells these bills to persons in England who are purchasing Indian products or Indian securities. The council bills therefore represent India's imports of services which she pays for by her exports of products and of equities in her properties. Inasmuch as the Secretary's excessive price for council bills made the use of these exports of British Government services to India impracticable on any considerable scale as remittance to India in payment for her exports, it became profitable to find some other kind of British export as a means of remittance. Moreover, the higher the exchange rate, and the longer the high rates prevailed, the more profitable

[1] East India Fin. Stat., 1894–95, p. 12.

the exportation of other goods to India became, since, as the demand for means of remittance to India increased the amount in English pence which the British exporter could secure for a given bill drawn against shipments to India also increased. A common resort in such a situation is to export securities and to draw bills against them. But obviously India was not buying British securities at this time nor was she buying back her own securities. Strong economic forces had caused the flow of securities from the country that was economically new to the one that was economically old. Since British securities were unavailable as exports to India with which to break down this attempt of the Secretary of State to establish a quasi-monopoly price on remittances to India, this function was performed by the exportation of that commodity which in India had been so highly marketable in the past, viz. silver. This was an occurrence which greatly surprised many, both in India and England, who had expected that with the closing of the mints the Secretary of State in his sale of council bills would be relieved from the competition of silver exports as a means of remittance to the East.[1] India, for generations the land of treasure hoards, of ornaments, and of the free coinage of silver, also a land whose great population was in the main ignorant, and dominated by custom, such an India could hardly be expected to discontinue the buying of silver when it became cheap, just because the mints had been closed to free coinage. What did the mass of India's three hundred millions of people know of the closing of the mints? In the past a tola of silver had always been saleable at the mints and at the bazaars for approximately one rupee, and the rupee had been convertible, by melting, into a tola. The majority of the natives saw no reason why such would not be the case in the future. But the advance in the value of the rupee

[1] Cf. The [London] Economist, Dec. 16, 1893, p. 1488; and Herschell Com. Rep., sec. 123; also cf. infra, pp. 114–115.

after the closing of the mints was making the rupee price of a tola in the market lower than ever before, at just the time when the practical suspension of the sale of council bills was putting a premium on bills of exchange drawn against the exportation of silver to India. Said the Indian Financial Statement for 1894–95:

"The divorce between the value of coined and of uncoined silver brought about a state of things utterly unknown in Indian history — in the experience at least of any of the present generation — viz., that uncoined silver could be sold at a profit for considerably less than its weight in coined silver. Silver dealers rushed in to make a profit out of the inability of the ordinary Indian to understand that it was not necessarily a profitable transaction to buy a tola of rupee silver for 15 annas. The question was violently agitated of imposing a silver import duty, so as to prevent a demand for silver that threatened to annihilate, by its own force, that balance of trade which had hitherto required settlement by council bills." [1]

For the eight months July 1893 to February 1894 inclusive, India's silver imports amounted to approximately 31 million fine ounces.[2]

Such heavy importations of silver at this time were unfortunate. One of the strongest objections urged against the Government's plan of closing the mints and raising the gold value of the rupee by relative contraction of the currency had been that it would at one and the same time depress the gold price of silver and raise the value of the rupee, with the result that India's great hoards of uncoined silver — hoards which under the silver standard could readily be turned into coin with little loss in times of

[1] Ind. Fin. Stat. for 1894–95, p. 11.

[2] These heavy silver imports taking the place of council bills as a means of remittance to India were obviously a surprise to the Secretary of State, for he had said in a telegram to the Viceroy as late as July 4, 1893: "Though silver will no longer compete with bills on India, gold may compete." Cd. 7253 of 1893, p. 3.

famine or other great emergency — would be greatly depressed in price. But here was a situation in which the Government's very mechanism for raising the value of the rupee was aggravating the evil by artificially stimulating the importation of silver bullion. In ignorance of the changed situation, and stimulated by the Secretary of State's action, the Indian people therefore were buying silver heavily upon what was practically certain to be a falling market.

The large supply of uncoined silver in India had been believed by many to offer a serious obstacle to that rarification of the currency which the reform plan contemplated. There was the constant menace of counterfeiting with full weight silver, a menace which would increase as the money value of the rupee rose above the bullion value; there was the possibility of the use of silver bullion as a medium of exchange; and, most important, there was the stimulus to native discontent and possibly revolution that this large supply of depreciating silver would continually offer to the natives.[1] All these dangers were aggravated

[1] "The change in the value of the rupee inflicts a cruel injury on an enormous class in India, namely, on those who have hoarded silver ornaments (a practice almost universal). Hitherto the mints have always afforded a fixed market in which nearly the full value of these ornaments could be at once realized without any shadow of doubt; and in times of scarcity or depression, enormous quantities of silver ornaments have been brought to the mints or deposited with the buniahs by those who had to pay their taxes, or satisfy other obligations in rupees; but now this market for such hoards no longer exists; the owners of such ornaments will not only find that the value of their hoards when measured in rupees is already about twelve per cent less than before, but that there is now no certainty about their value, which is fluctuating and likely to fall still lower, thus giving rise to an element of uncertainty, of which the buniahs will naturally take advantage, to the prejudice of the unfortunate holders of the hoards." Guilford L. Molesworth, British delegate from India to the Brussels International Monetary Conference of 1892, in Ann. Amer. Acad. Pol. and Soc. Sci., IV (1893–94), p. 524.

The Herschell Committee, although disposed to minimize the importance of these ornament hoards for later years, said that no less than 45 million rupees were coined at the Indian mints from the melting down of such

by the large importation of silver after the closing of the mints.

The situation became so serious that after considerable discussion the Indian Government imposed an import duty on silver coin and bullion.[1]

(3) *Fiscal Results.* A third result of the Secretary of State's attempt arbitrarily to maintain a high price for council bills was the imposition of a heavy financial burden on the Indian Government. The Secretary of State had estimated that he would raise £18.7 millions by council bills during the fiscal year ending March 31, 1894. During April, May, and June of 1893 he issued an unusually large amount of council bills aggregating over £5.7 millions, and leaving, according to his estimate, £13 millions to be sold during the balance of the fiscal year. When in the first week of July the Viceroy sought to have him stop the extra allotments of council bills and to hold the price of bills up to 16*d.*, he replied that, considering the requirements of the home treasury which would average about £347,000 a week, he could not run the risk of holding to that rate.[2] None the less, as we have seen, he yielded to the extent of undertaking to maintain a rate of $15\frac{7}{8}d.$ and later of $15\frac{1}{4}d.$ The result was that for the seven months, July 1893 to January 1894, during which he was trying to maintain his high rates, he sold council bills only to the amount of £862,602, whereas according to his estimate, he should have sold £10.1 millions. To meet the emergency certain payments were delayed, others reduced, the Secretary's cash balance was permitted to decline over a million pounds, and £7,386,000 were borrowed. Meanwhile, at the very time these inconveniences were being experienced

ornaments during the great famine of 1877 and the years immediately following. Report, sec. 106.

[1] Cf. East India Fin. Stat. for 1895–96, pp. 6, 10, and 11; also Fowler Com. Rep., App. II, Table 5.

[2] Cf. telegrams Nos. 4, 6, and 7. Cd. 7253 of 1893, pp. 3 and 4.

and the interest-bearing debt incurred, there was "an enormous accumulation of silver" in the Indian Treasury, and the Secretary's idle cash balance in India at the end of February had grown to the unprecedented figure of R. 250 millions.[1]

"Starving the Circulation," 1893–1898

We are now prepared to consider the more general aspects of India's five-years experience in raising the gold value of the rupee. The essence of the reform plan as formulated by the Indian Government and the Herschell Committee was, by closing the Indian mints and limiting the supply of money while the demand for money was increasing through the growth of population and trade, to divorce the value of the rupee from that of its silver content, and to prevent its further depreciation. Some absolute reduction in the rupee circulation was also contemplated.[2] In the minds of those responsible for the plan the object, as we have seen,[3] was not so much to raise the value of the rupee as to stabilize it and prevent its further depreciation.

The 16*d.* par was selected largely because it represented a close approximation to the average value of the rupee during the years immediately preceding, and at the same time left a sufficient margin of safety above the bullion value at the time to protect it from the melting pot. This 16*d.* rate, moreover, was looked upon as a purely tentative one that might be raised if the situation should so demand. The plan adopted therefore was not so much to raise the value of the rupee as it was to maintain it, although a certain amount of "raising" was obviously necessary.[4] In a telegram to the Viceroy dated August 23, 1893, the Secretary of State, protesting the advisability of meeting the

[1] East India Fin. Stat. for 1894–95, pp. 12–13.

[2] Herschell Com. Rep., sec. 50; and David Barbour, The Standard of Value, p. 186.

[3] Supra, pp. 35–36.

[4] Cf. Herschell Com. Rep., secs. 135 and 150.

Government of India's suggestion that he announce a minimum rate of 16*d.* for council bills said:

"The object of the recent currency legislation was to arrest the further fall in exchange which appeared to be imminent at the time."

Sir David Barbour, twenty years later, in explaining the theory of the reform said:

"The proposals recommended by the Government of India had been drawn up by me and were to the effect that the Indian mints should be closed to the unlimited coinage of silver and no further steps taken until the effect of closing the mints had been ascertained." And again: "I was firmly convinced of the soundness of the quantity theory of money and knew that if the unlimited coinage of silver was stopped, it was quite possible to reduce the amount of the rupee circulation to such extent as to bring the Indian exchange to a par with gold at a rate of exchange which could be permanently maintained. How great the necessary amount of reduction might be I could not tell."[1]

In 1898, W. H. Cheetham of Calcutta stated the theory of the reform well when he said:

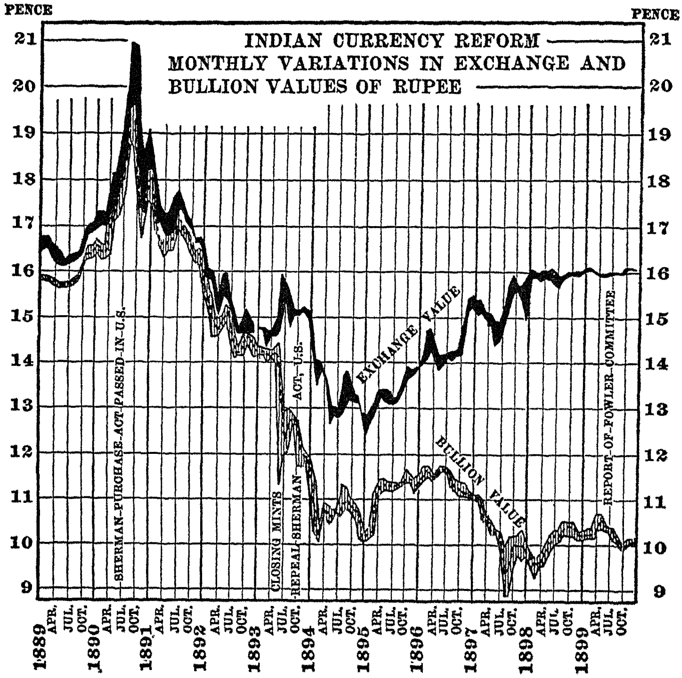
"The closing of the mints has reduced the volume of the currency in relation to trade. Population is always increasing, and trade is expanding; if you do not continually add to the currency, you actually in fact reduce it; that is to say, it is reduced in relation to requirements."[2] The plan was variously called "starving the currency," "rarification of the currency," "creation of scarcity value," and "relative contraction of the currency."

Effect of Closing Mints on Relation between Bullion Value and Exchange Value of Rupee. How did this scheme of relative contraction work? The story of the next six years

[1] David Barbour, The Standard of Value, pp. 202 and 186.

[2] Fowler Com. Rep., Q. 8713.

of Indian exchange is told graphically on the following chart. One of the first facts that strike a person, on examining the chart, is that down to June 1893 — the month in which the mints were closed — the bullion value



of the rupee and the exchange value moved continually together, but that from that date forward the close parallelism in the movements of the two values ceased. It was no longer possible to have bullion transformed into rupees by the payment of a small brassage charge whenever the gold value of the rupee rose above the gold value of 180 grains of silver, 11/12 fine. The closing of the mints had divorced the two values and the divorce decree became effective at once.

A second fact that strikes the attention is, that, ignoring the brief and sharp rise in exchange immediately following the closing of the mints which was due to the Secretary of State's ill-fated attempt to hold up exchange by maintaining excessively high rates for council bills, exchange moved downward until January 1895; and that, although during this period the exchange value of the rupee was always far above the bullion value, and the difference tended to be a widening one, there was still a remarkable parallelism in the movements of the two curves. Clearly the closing of the mints had failed to maintain exchange at the old level, and, although the bullion value of the rupee and the exchange value may have been divorced, they still showed a considerable "hankering after each other." From February[1] 1894 to January 1895, the correlation between the mean monthly exchange value of the rupee and the average monthly bullion value gives a coefficient (according to Karl Pearson's method) of + .58 ± a probable error of .128. This is a small correlation but a real one.

What is the explanation of this decline in the exchange value of the rupee at a time when the mints were closed, and of this correlation between the exchange value and the bullion value of the rupee at a time when bullion could not be transformed into rupees on private account at the mints?

The first point to be noted is that the decline in the sterling exchange value of the rupee was not so great as is commonly supposed. The "sag" in exchange during the greater part of the year 1894 has usually been contrasted with the "peak" of June 1893, which was largely nominal and due to the Secretary of State's council bill fiasco. If one compares 1894 rates with the rates prevailing immediately before the closing of the mints, he will find that

[1] February is taken as the first month of comparison because it was not until January 20 that the Secretary of State discontinued his effort to hold up the price of council bills. Supra, pp. 41–42.

the average telegraphic transfer rate in Calcutta for the period April 5 to June 2, 1893, was $14\frac{11}{16}d.$, and for the period February 1894 to January 1895 (monthly averages, inclusive) was $13\frac{1}{4}d.$ — a decline of 9.8 per cent. The decline from the average of the first period to the minimum rate of 1895 (viz., $12\frac{5}{8}d.$ in January) was 14 per cent. These were not heavy declines for a country like India, as a glance at the exchange curve of the chart for the period prior to the closing of the mints will show.

The second point to note is that the supply of currency was not absolutely limited to the amount in circulation at the time the mints were closed. "Immediately after the closing of the mints, the Government accepted from banks and others silver to the amount of Rx. 2,000,000 [*i.e.* 20,000,000 rupees], which had been shipped to India before the closing of the mints, and coined it. . . ."[1] There was an expansion in the average circulation of notes uncovered by silver during the fiscal year ending March 31, 1895, of 25.3 millions, whereas during the preceding fiscal year there was a contraction of 28.2 millions.[2] Further, the resumption of the sale of council bills in considerable quantities after January 1894 released from government treasuries many millions of rupees that had been physically tied up in vaults during the period of the practical suspension of council bill sales. For the fiscal years 1892–93, 1893–94 and 1894–95, respectively, the amounts of council bills drawn were (in round numbers) R. 265 millions, R. 157 millions, and R. 310 millions, showing that the sales of 1894–95 were practically double those of the preceding year.[3] The cash balances in government treasuries (exclusive of those on deposit in banks) for the close of the same three years respectively were, R. 110.7 millions, R. 222.0 mil-

[1] J. Barr Robertson, The Currency Policy of India, in Jour. Soc. of Arts, March 27, 1903, p. 427.

[2] Statistical Abstract relating to British India, 33d number (1899), p. 140.

[3] Ibid., p. 137.

lions, and R. 181.0 millions.[1] There were, moreover, many millions of rupees in circulation in the native states of India, and in the other countries in the neighborhood, and many of these rupees returned to British India when the silver exchanges and the falling rupee price of silver showed that the rupee possessed a substantially higher value as money than as bullion. Probably the largest source of the increase in the rupee circulation, however, was the rupee hoards. The efficiency of money is measured in terms of the rate of turnover. Money in hoards has a turnover rate of zero. What proportion of India's enormous hoards of silver was in the form of rupees, and what proportion in the forms of bullion and ornaments, no one knew. Sir A. P. MacDonell, who had held high official positions in India for many years, and who was a member of the Viceroy's Council from the end of 1893 until April 1895, testified before the Fowler Committee that in his opinion an Indian cultivator, out of each 100 rupees saved, would normally store away 75 in rupees and melt down the other 25 for ornaments.[2] Mr. W. H. Cheetham, a merchant of Calcutta, testified before the same Committee that the above testimony of MacDonell's coincided with independent evidence that he had.[3] After the closing of the mints the prices of silver bullion and ornaments in India declined, *i.e.* from the point of view of the natives they became cheaper. The price of a tola of silver fell and silver could no longer be turned into rupees at the mints.[4] From this situation there naturally followed a reduction in the

[1] Computed from figures given for the different treasuries, etc. Ibid., p. 136. Were the figures for 1893–94 and 1894–95 for the end of January instead of the end of March, the increase in circulation from this source would probably have appeared much greater since the sale of council bills on a substantial scale was resumed after January 20, 1894.

[2] Fowler Com. Rep., Evidence, Q. 5769.

[3] Ibid., Q. 8809.

[4] Preceding the closing of the mints the average annual coining of rupees had been about 70 millions. Correspondence Respecting the Proposals on Currency Made by the Government of India, Cd. 8840 of 1898, p. 3.

number of rupees being melted down[1] and an increased accumulation of ornaments which were becoming cheaper. The average native could hardly be expected to believe that the rupee was appreciating. To this day the average American business man believes that "a dollar is a dollar," which is his way of saying that the dollar is stable in value and all other goods vary. The result of this situation in India was the continuance in circulation as money of many rupees that under the silver standard would have been melted down and hoarded or exported; and the calling out of hoards and into active circulation of millions of rupees whose monetary efficiency had previously been zero.

Any attempt at a complete explanation of the decline in exchange during the calendar year 1894 would require the consideration of numerous other factors, the chief of which would be the relative monetary demand as exemplified in the amount of business done in 1894 in comparison with 1893. On this subject there is little useful information available, and such consideration as we can give it will be found later when the period of "rupee appreciation" as a whole is discussed.[2] Here it is merely intended to show that there were important forces[3] at work during the early stages of the period which prevented that rigid limitation of the currency supply that was desirable in the interest of a prompt "rarefication of the currency."

Having reached its low point in January 1895, the exchange value of the rupee began an upward move independent of the bullion value, which continued at the lowest

[1] Mr. Frederick Harrison estimated that at the time of the closing of the mints the normal annual "wastage" of rupees was 60 million, but that of this sum, the wastage of $27\frac{1}{2}$ millions was due to melting for industrial usage — a form of wastage which the closing of the mints had practically stopped. Econ. Journ., IV (1894) p. 264.

[2] Cf. infra, pp. 70–71.

[3] One of these forces was the depressing effect on business which the Secretary of State's unfortunate council bill policy exerted through causing the public to lose confidence in the success of the new currency plan.

level in history; and by the latter part of 1897 the exchange value nearly reached the 16*d*. par. At that point, however, the rupee showed great instability, and seemed unable to attain and clinch the 16*d*. rate.[1] This was the situation when on March 3, 1898 the Government of India sent a communication to the Secretary of State for India calling attention to "the pressing necessity of taking active measures to secure the stability of exchange which was the main object of the policy adopted in June 1893" — a communication which led to the appointment of the Indian Currency Committee of 1898 commonly known as the Fowler Committee from the name of its chairman, Henry N. Fowler. Before taking up the work and recommendations of that Committee, it will be well to consider the extent to which the rupee appreciated and some of the forces at work during the period of appreciation.

[1] In a memorandum on Discount Rates in India submitted to the Fowler Committee (App. I, p. 67), Messrs. J. M. Anderson and H. M. Ross said: ". . . The fixing of 1*s*. 4*d*. as the convertible rate of the rupee in India, and of 1*s*. 4$\frac{5}{32}$*d*. as the convertible rate against deposits of gold in England, amounts to a firm offer of rupees to all comers for all time at these rates [?]. It is therefore clear that every banker or merchant, having such firm offer to fall back on, will exercise all his ingenuity to obtain his rupee requirements on better terms, and will only close with the Government's offer when all the other means have failed him. This is the secret of the failure of the repeated attempts of the Secretary of State to fix a minimum for his council bills, for it is to be understood that the minimum of the Secretary of State is the maximum of the banker or merchant, and, as such, is evaded as long as possible. Each time that exchange approaches this maximum, the export merchant ceases to sell bills, since he cannot sell them on worse terms, and may, by waiting, sell them on better, while the importer hastens to buy sterling in excess of his requirements, because he cannot lose, and may gain, by so doing. During the last two years exchange has again and again approached this maximum, only to recede almost immediately, from the effect of mercantile and banking operations such as are here described."

Another reason for this inability to clinch the 16*d*. rate appears to have been the tendency of Europeans who lacked confidence in the system to take advantage of this rate, when it was reached, to send capital back home. Cf. Memorandum of Chairman of Madras Chamber of Commerce, in Correspondence Respecting the Proposal on Currency Made by the Government of India, Cd. 8840 of 1898, p. 12. Cf. also Fowler Com. Rep., Evidence, Qs. 287 and 288.

To What Extent Did the Rupee Appreciate between 1893 and 1898?

The chart shows that the sterling exchange value of the rupee, after declining to about 12½*d.* in January 1895, rose to approximately 16*d.* in January 1898. But this tells us merely the value of the rupee in terms of one other commodity — gold, a commodity which itself was very unstable during this period.

The value of gold is best expressed in its purchasing power over a large number of commodities. For England the variations in the purchasing power of gold over an average of 45 commodities are expressed in the reciprocals of the Sauerbeck index numbers of wholesale prices. Let us compare the annual movement of the value of gold so expressed with the annual movement in the gold value of the rupee for this period.

Appreciation of Rupee in Terms of British Commodities, 1893–1898
(A minus sign shows decrease)

Calendar Year	Reciprocal of Sauerbeck Index Numbers Av. 1867–77 = 100	Percentage Increase Each Year over Preceding Year	Average Exchange Value of Rupee (Telegraphic Transfer) Pence	Percentage Increase Each Year over Preceding Year	Annual Appreciation of Rupee in Terms of English Commodities Percentage
1893	147.1	0.0	14.97		
1894	158.7	7.9	13.41	− 10.4	− 2.5
1895	161.3	1.6	13.28	− 1.0	0.6
1896	164.0	1.7	14.38	8.3	10.0
1897	161.3	− 1.6	14.73	2.4	0.8
1898	156.2	− 3.2	15.93	8.2	5.0

Briefly summarized the table shows: (1) that in terms of purchasing power over commodities in the United Kingdom the rupee declined 2.5 per cent in 1894, and that each succeeding year to 1898 it rose, the rises in 1896 and 1898

however, being the only important ones; (2) that in 1896 the gold value of the rupee rose 8.3 per cent, but that, inasmuch as the value of gold itself rose 1.7 per cent, the actual appreciation of the rupee (in terms of purchasing power over British commodities) was 10 per cent; (3) that in 1897 and 1898, while the value of the rupee moved toward 16*d.* gold, the value of 16*d.* gold moved to meet the rupee, thereby hastening the time of the attainment of the 16*d.* gold par; (4) that from 1894 to 1898 gold depreciated 1.6 per cent in terms of purchasing power over English commodities, and the rupee appreciated 17.2 per cent.

But how about the value of the rupee in India as measured by its purchasing power over Indian commodities? On this subject the data are less satisfactory, for India is a large country in which very different prices often prevail for the same commodity in different sections. The best criterion of the variations in the purchasing power of the rupee in India is found by taking the reciprocals of the Atkinson index numbers of the prices of one hundred commodities in India.[1] Below is given a table showing, for the years 1893–99, the Atkinson index numbers for each of three groups of commodities. Index numbers are also given showing the annual fluctuations in the value of the rupee as expressed in its purchasing power over each of these groups of commodities, and over all the groups combined.

[1] These index numbers were prepared by Mr. Fred J. Atkinson, Accountant General of the United Provinces of India. They were first published in the Journal of the Royal Statistical Society of March 1897, and were brought down to 1908 in the isssue of September 1909 (pp. 500–502). The 100 commodities consist of 60 articles of food, 29 of raw produce, and 11 of manufactures. The average for the years 1868–76 is taken as 100. The weighting was accomplished "by giving to each commodity included as many quotations as corresponded to its importance in the whole production value of India in 1893." Cf. Bulletin No. 73, U. S. Bureau of Labor Statistics, pp. 276–282.

VARIATIONS IN PURCHASING POWER OF RUPEE

(A minus sign shows decrease)

Year	Food, 60 Articles			Raw Produce, 29 Articles			Manufactured, 11 Articles			All Articles, 100		
	Price Index Nos.	Purchasing Power of Rupee		Price Index Nos.	Purchasing Power of Rupee		Price Index Nos.	Purchasing Power of Rupee		Price Index Nos	Purchasing Power of Rupee	
		Index Nos.[1]	Ann. % Increase		Index Nos.[1]	Ann. % Increase		Index Nos.[1]	Ann. % Increase		Index Nos.[1]	Ann. % Increase
1893	131	76.3		117	85.5		113	88.5		125	80.0	
1894	121	82.6	8.3	118	84.7	− 0.9	116	86.2	− 2.6	119	84.0	5.0
1895	113	88.5	7.1	125	80.0	− 5.6	118	84.7	− 1.8	116	86.2	2.6
1896	133	75.2	− 15.0	120	83.3	4.1	111	90.1	6.4	127	78.7	− 8.7
1897	171	58.5	− 22.2	114	87.7	5.3	103	97.1	7.8	149	67.1	− 14.7
1898	131	76.3	30.4	90	111.1	26.7	98	102.0	5.0	122	82.0	22.2
1899	122	82.0	7.5	111	90.1	− 18.9	102	98.0	− 3.9	117	85.5	4.3

[1] The figures in this column are the reciprocals of those in the preceding one.

For the five years prior to the closing of the mints the rupee had been depreciating in its purchasing power over commodities in India; that is, prices had been rising.[1] Immediately after the closing of the mints the value of the rupee as measured by its purchasing power over Indian commodities began to increase. In 1894 it rose 5 per cent over 1893 and in 1895 it rose 2.6 per cent over 1894. This increase in purchasing power in both of these years was limited to the "food group" of 60 articles, the purchasing power of the rupee over the "manufactures group" of 11 articles having declined slightly in each of the two years, and that over the "raw produce group" of 29 articles having declined slightly in 1894, and substantially in 1895. The years 1896 and 1897 went contrary to expectations and each year witnessed a large depreciation in the purchasing power of the rupee, the decline being 8.7 per cent in 1896 and 14.7 per cent in 1897. A glance at the table, however, will show that this decline took place only in the "food group," the purchasing power of the rupee over raw produce having increased on the average 4.1 per cent in 1896, and 5.3 per cent in 1897; while that over manufactures increased 6.4 per cent in 1896 and 7.8 per cent in 1897. The fact that prices in the other groups fell in these two years while those in the food group rose is explainable by the great famine which India suffered at that time.

In the fall of 1896 the monsoon failed, crops were ruined, and India found herself face to face with one of the worst and most widespread famines in her history. The famine was accompanied by a visitation of the Plague in certain parts of the country, a devastating earthquake along the eastern side, and fanatical attacks of the tribes on the northwest border necessitating rather extensive military

[1] The Atkinson price index numbers for 100 articles for these five years respectively were as follows: 1887 — 101; 1888 — 108; 1889 — 114; 1890 — 114; 1891 — 116; 1892 — 128.

operations.[1] The Government's expenditures for famine relief, which were very large and which caused heavy deficits in the budget, showed that the effects of the famine were severe for about eighteen months.[2]

During that period the prices of food (which constitute the bulk of the items in the Atkinson index numbers) rose to extravagant heights. O'Conor's figures for the retail prices of India's seven chief food grains collected in representative places throughout the country showed that the prices of these grains together moved as follows (taking the average price for 1891–95 as 100):[3]

Calendar Year	Index Number
1893	99.2
1894	88.7
1895	93.0
1896	120.0
1897	160.0
1898	107.9

At the same time the prices of staple articles not belonging to the group of necessary foods continued to fall, registering the appreciation of the rupee. O'Conor calculated wholesale price index numbers for twelve important articles of export.[4] Omitting from his list the two important Indian food articles, rice and wheat, and combining the other ten articles,[5] using Calcutta prices where prices for two or more

[1] Cf. Financial Statement 1897, pp. 37, 49, 64, 65; and Fin. Stat. 1898, pp. 7, 10, 11, and 15.

[2] For quarterly periods ending December 1896, and March, June, September and December 1897, respectively, the amount of relief money spent by the Government (in millions of rupees) was 1.3, 19.0, 24.9, 23.7, and 6.4. The numbers of millions of units relieved (a unit being one person for one day), respectively, for these five quarterly periods were 32.1, 228.7, 312.9, 222.3, and 32.8. East India Fin. Stat. 1898, pp. 10–11.

[3] Fowler Com. Rep., App. II, p. 170.

[4] Ibid., p. 161.

[5] The articles were cotton, opium, linseed, jute, jute gunny bags, tea, cotton yarns, cotton tea-cloth, indigo, and hides.

sections are given, we find that the index number of these articles moved as follows:

1891–95	100.0
1893	109.6
1894	104.0
1895	105.7
1896	103.9
1897	92.6
1898	87.0
1899	81.7

Every one of the ten articles but jute was lower in 1897 than in 1896, all but three (viz. cotton, jute, and cotton yarn) were lower in 1897 than in 1895, and all but three (viz. tea, indigo, and cotton tea-cloth) were lower in 1898 than in 1897, and of those three the two former were unchanged and the last rose but one point. Except for foods therefore, which bore famine prices, the evidence points to a downward tendency for prices in India beginning with 1895. Food prices which had declined in 1895 rose to great heights during the famine period of the latter part of 1896 and the year 1897, and then resumed their downward course.

John Stuart Mill in a well-known passage concerning the relation of money to prices said: "At prices one fourth higher, one fourth more money would be required to make the accustomed purchases; and if this were not forthcoming, some of the commodities would be without purchasers, and prices could not be kept up."[1] In India at this time whence came the money to make possible the marketing of these foods supplied at such abnormally high prices? Aside from a small expansion of circulating bank credit, the chief factors permitting this expansion appear

[1] Political Economy, II, pp. 43–44 (Appleton Edition, 1899). Mill had in mind a society in which exchanges were all made with money, and apparently assumed a constant rate of monetary turnover.

to have been as follows: (1) A decline in the amount of goods sold. Although food prices were much higher than normal, the quantity of food bought and sold was much smaller. The monetary demand as related to food sales is represented by the number of units of food sold multiplied by the average price per unit.[1] Furthermore the famine interfered with business in many other lines, lessening the monetary demand. (2) The monetary circulation was actually increased: (*a*) By an Act of December 17, 1896, 20 millions of rupees were authorized to be released from the government Paper Currency Reserve, securities to be substituted.[2] By the end of March 1897 this coin had all been put into circulation. (*b*) The Government's cash balances in treasury vaults were greatly depleted, the funds having been paid out largely in relief work. Cash balances in government treasuries (exclusive of government balances in banks) at the end of the fiscal years 1894–95, 1895–96, and 1896–97, respectively, were: R. 185.3 millions, R. 122.0 millions, and R. 99.7 millions.[3] (*c*) Large amounts of rupees — how large no one knows — were withdrawn from hoards and put into active circulation.

Relation between Exchange Rates and the Price Level

From what has been said it is evident that, while from 1895 to 1898 the general tendency of rupee prices was downward (due allowance being made for famine food prices), and the tendency of exchange rates was upward — both movements registering the appreciation of the rupee — there was apparently no appreciable correlation between the two movements.[4]

[1] The unit taken for each article would be the amount that could be bought for R. 100 in the base year.

[2] East India Fin. Stat. 1897, pp. 62–63.

[3] Computed from Statistical Abstract relating to British India, 33d No. (1899), p. 136.

[4] The figures for price movement, covering as they do units of years,

The idea is often met that the movement of rupee exchange rates between the closing of the mints in 1893 and the attainment of the 16*d*. par in 1898 reflected the movement of the value of the rupee in India, that is, of its purchasing power over Indian goods and services. While there are forces that tend to cause a rough correlation between the two movements, the price movement tends to lag behind the "exchange" movement, and the response is particularly slow and impeded by economic friction in a country like India with its isolated communities and its respect for custom.

Passing over the fact that exchange rates, being merely the gold price in England of the right to one rupee in India, or the amount of gold in England one could obtain for one rupee in India (either at once, *i.e.* cable, or after a stated period of time), reflect changes in the value of gold *per se* as well as changes in the value of the rupee[1] *per se*, we should note that gold is merely one of many commodities whose price is expressed in the value of the rupee. Furthermore, it should be emphasized that gold, which is a commodity of universal demand, easily transferable, and with a highly organized and keenly competitive world market, is one of the most sensitive of commodities in its price movement. During the American greenback period, when the greenback was depreciating, the price of gold and the rates for the gold exchanges were the first to rise substantially, and rose farthest; and when the greenback began to return toward par, they were likewise the first to decline. Wholesale prices, retail prices, and wages lagged behind gold in the order mentioned both on the upward movement and the downward movement. The greenback price of gold and gold exchange (as long as the exchanges were quoted in greenbacks) were responsive to the daily rumors and to the

afford no satisfactory basis for comparison with exchange rates, for such a brief period, in order to determine a useful coefficient of correlation.

[1] Cf. supra, pp. 17–21.

temporary successes and failures of the Northern cause, which found no appreciable response in the more lethargic prices for commodities and services.[1] A similar situation appears to have existed in India. While India's exports and imports in the absolute are large, still, in the main, the people of India live on their own products, and a large part of those products run their life history from production to consumption in a very small territory. They have only the remotest connection with foreign trade, gold, and the gold exchanges. In time, of course, any substantial disturbance in the equilibrium of values in the country's import and export trade will make itself felt in these local prices, but, allowing for exceptions, it may be said that in a country like India the influences of such disturbances travel very slowly and lose much of their momentum in traveling.

In the articles of import or export and closely related articles the response of prices to exchange movements is quicker and more direct. If the Indian currency is contracted relative to trade demands, so that "there isn't enough to go around" at the old prices, a few of the more sensitive commodities in which there is keen competition "give way" early, and among these gold is usually the first to yield. If sterling exchange rises from 14*d.* to 15*d.*, the Indian exporter of cotton yarns who has sold £1000 worth of yarn in England will find that, although he is selling his yarns for the same gold price as before, he now is receiving for his shipment only R. 16,000 whereas formerly he received R. 17,140. This will cut into his profits, perhaps lessen his production and export of yarn, and thereby reduce his demands for cotton and also for labor, in turn tending to push down the price of raw cotton and the wages in the cotton industry. A decline in the exportation of yarn lessens the supply of sterling bills and tends to force down

[1] Cf. W. C. Mitchell, A History of the Greenbacks, pp. 239–279; also infra, pp. 345 and 426–428.

exchange rates. On the other hand, an advance in exchange from 14*d*. to 15*d*. enables the importer of cotton cloth in India to buy £1000, with which to pay for his cloth in England, for only R. 16,000 instead of R. 17,140 as formerly, a net gain which stimulates the importation of cotton cloth, and tends to raise the foreign price of such cloth and to depress the Indian price of cotton cloth, cotton garments, etc. While the abnormally large imports of cotton cloth continue, they create an extra demand for sterling exchange and tend to lower the rate, thereby destroying the extra exchange profit which had been the stimulus to the additional imports. In this way prices in India and abroad tend to be brought into equilibrium with each other, and home prices into equilibrium with the rupee value of gold as expressed in exchange rates. But all this adjustment takes time, and, in a country like India, much time. New forces are continually coming into operation, and a condition of static equilibrium is never reached. This lag in the adjustment of prices in India is shown by the fact that the Atkinson index numbers of Indian prices fell from 149 in 1897 to 122 in 1898 and 117 in 1899, although the 16*d*. par was practically reached in January 1898, and although general prices in England at this time were tending upward; the Sauerbeck index numbers having increased from 62 in 1897 to 64 in 1898 and 68 in 1899.

Although there is a tendency to an inverse correlation, with a lag, between exchange rates (when quoted in terms of the foreign money as are sterling rates in India) and general prices, there occasionally arise conditions in which temporary forces tend to pull exchange rates and general prices in the same direction. For example, during the famine in 1897 the Secretary of State, to relieve the Indian Government of a drain on its funds, discontinued for a time the sale of council bills, thereby forcing up exchange while the very funds that would have normally been released from Indian treasury vaults and injected

into circulation by the sale of the council bills were none the less put into circulation by government expenditures for famine relief; and the famine was dragging millions of rupees into circulation from the hoarded savings of the people.[1]

Discount Rates 1893–98

There was much complaint of the high discount rates in India during the period in which the rupee was appreciating. A superficial examination of the published discount rates of the period 1893–98, in comparison with those of the preceding five-year-period and the succeeding one, fails to show the rates of 1893–98 to have been exceptionally high. Below are given the simple averages of the prevailing official minimum discount rates of the Presidency Bank of Bengal,[2] by half-year periods, for the five years preceding the closing of the Indian mints (*i.e.* July 1, 1888 to June 30, 1893), the five years during which the rupee was being raised to the gold par of 16*d.* (*i.e.* July 1, 1893 to June 30, 1898), and the five years succeeding the practical attainment of the 16*d.* par (*i.e.* July 1, 1898 to June 30, 1903).[3]

[1] The Indian Financial Statement of 1898 (pp. 14–15), after referring to the demands for famine relief and the hostile attacks on the northern frontier in the summer of 1897, said: "These demands came upon us at the most difficult time of the year, so far as the supply of funds is concerned, for under ordinary circumstances our cash balances . . . run down throughout the five months, July to November. A careful reëxamination showed that, in the face of the new demands upon us, we would be obliged to ask the Secretary of State to greatly reduce his drawings; and, as the military operations became more extensive, he not only stopped them altogether, but remitted back to us a crore of rupees out of the amounts he had already drawn."

[2] Professor Keynes refers to these rates as the rates charged day by day for a loan advanced on such security as government paper, the interest on which is calculated day by day at the published rate prevailing on each day. "The rates, announced by the three Presidency Banks, are not always identical, but seldom, if ever, differ by more than 1 per cent." Keynes refers to these Presidency Banks rates "as the best available index to variations in the value of money in India." J. M. Keynes, Indian Currency and Finance, pp. 240–242.

[3] These average minimum rates for the period 1888 to 1898 are weighted

Average Discount Rates at Presidency Bank of Bengal

Half-Year Periods

1888–1893		1893–1898		1898–1903	
Date	Rate	Date	Rate	Date	Rate
1888 (2)	5.2	1893 (2)	4.1	1898 (2)	5.0
1889 (1)	9.3	1894 (1)	7.3	1899 (1)	6.2
1889 (2)	4.7	1894 (2)	3.6	1899 (2)	5.6
1890 (1)	8.3	1895 (1)	5.1	1900 (1)	6.4
1890 (2)	3.3	1895 (2)	3.6	1900 (2)	4.2
1891 (1)	3.5	1896 (1)	5.8	1901 (1)	6.8
1891 (2)	2.6	1896 (2)	5.6	1901 (2)	4.1
1892 (1)	3.9	1897 (1)	9.9	1902 (1)	6.2
1892 (2)	3.1	1897 (2)	6.0	1902 (2)	3.6
1893 (1)	5.7	1898 (1)	11.0	1903 (1)	6.3
Average of first half-years .	6.1	Average of first half-years .	7.8	Average of first half-years .	6.4
Average of second half-years	3.8	Average of second half-years	4.6	Average of second half-years	4.5
Average of years	5.0	Average of years	6.2	Average of years	5.4

These figures show an average interest rate (6.2 per cent) somewhat higher for the five-year period of relative contraction, July 1, 1893 to June 30, 1898, than for the preceding five-year period (5 per cent) or the succeeding one (5.4 per cent); but this difference is due chiefly to the abnormally high rates of the famine period.

The actual rates, however, of the currency reform period

according to the number of days the respective rates were in force, and were taken from Table No. 14, App. II, of the Fowler Committee Report. The figures for the years 1899 to 1903 represent the average of the simple averages of the rates prevailing during each month. Those for the years 1899 and 1900 were taken from the chart facing p. 240 of Keynes' Indian Currency and Finance, and those for the years 1901–03 were computed from the table given in App. II of the Report of the Royal Commission on Indian Finance, 1914, p. 86.

are higher than the superficial figures show. It is in its purchasing power over Indian commodities that the real value of the rupee should be measured, and the fact should not be overlooked that the five-year period before the reform and the five-year period following the reform were both periods in which the purchasing power of the rupee was falling; while the period of the reform was one in which it was rising. In other words, the lender during the first and third periods was usually paid back his principal in a less valuable rupee than he loaned, and the interest itself each year was paid in a depreciating unit. To compensate for this depreciation in the money unit a higher interest rate was needed. On the other hand, during the period of appreciation the lender tended to be paid both principal and interest in a more valuable unit than he loaned. To compensate for this appreciation in the money unit a lower interest rate was needed. From 1888 to 1893 the average annual interest rate was 5 per cent. The average annual depreciation in the purchasing power of the rupee was 2.7 per cent,[1] which reduced the "purchasing power interest rate" or "commodity interest rate" to an average of approximately 2.3 per cent. From July 1, 1898 to July 1, 1903 the average annual interest rate was 5.4 per cent; and for the period January 1, 1898 to January 1, 1903 the average annual depreciation of the rupee was 1/3 of 1 per cent, making the purchasing power interest rate average for the five-year period slightly over 5 per cent. For the period of appreciation 1893–98 the average annual rate was 6.2 per cent, and the average annual appreciation of the rupee was approximately .5 per cent, giving an average annual commodity interest rate for the period of approximately 6.7 per cent.

As the result of the careful studies of Professor Irving

[1] The Atkinson index numbers for prices in India increased from 108 in 1888 to 125 in 1893, showing a depreciation of the rupee for the five years of 13.6 per cent.

Fisher, we know that a long period of relative contraction of the currency is likely to depress industry through forcing down prices, and thereby to lessen the demand for capital and depress interest rates. Furthermore, whenever the lending and borrowing public are conscious to any considerable extent of an artificial "raising" of the money unit, as they were in India from 1895 to 1898, there is likely to be, to a small extent, a conscious allowance for the appreciation of the money unit in the fixing of interest on long-time loans. For India, however, the period of actual appreciation was too short and too uncertain to give these forces full play. Even in such times, moreover, when the interest rate on long-time obligations is tending downward, the restraints and uncertainties of a period of relative currency contraction are very likely to lead to decided fluctuations in the rates on short-time bank loans. This was the experience of the United States between 1865 and 1879, when the greenback was appreciating, and may explain in part the instability of the interest rate in India during the period 1893–98.

While of course capital and money are not the same thing, still money is an important part of capital, and it is through the form of money or rights to draw money on demand that loans of capital goods are usually made. A period therefore in which the currency supply is being reduced relatively to trade demands is likely to be a period in which funds loanable *on short maturities* will not readily be forthcoming to meet exceptional though temporary demands.

When one notes the irregularity of the interest rate movements of these periods, and of the price movements during the second and third periods, also the short duration of the period of appreciation, and the artificial conditions prevailing during the latter part of it arising from famine and border warfare, he is precluded from drawing any safe inferences from the data available as to the influence of relative contraction upon the interest rate.

Absolute or Merely Relative Contraction of Currency, 1893–98

There has been much discussion among students of Indian currency concerning the question whether between 1893 and 1898 there was any actual contraction of the currency or not. Elaborate and ingenious calculations have been made of the amounts of money in circulation at the beginning and at the end of this period.[1] Into this controversy we need not go. The important question is not whether there was an actual contraction of the currency or not, but whether there was a contraction relative to trade demands. In the absence of any even remotely satisfactory indices of the growth of business in India during this period, *i.e.* of the variations in the demand for money, speculations as to the net amounts of money withdrawn from hoards, imported from abroad and from the native states, amounts melted down, etc., seem largely gratuitous. Furthermore, we have no evidence as to variations in the efficiency of money in India as expressed in rates of monetary turnover, and no adequate information concerning variations in the circulation of deposit currency and in the proportion of bank reserves to deposit circulation.

If the law of supply and demand in its application to money needs to be subjected to an inductive test, that test may best be made in some advanced country like the United States,[2] where a moderate amount of roughly reliable data are available, rather than in a country like India, where the data for such a study are grossly inadequate. The presumption is strong that the law of supply and demand applied to currency conditions in India during the

[1] For a brief summary of different investigations of the rupee circulation, with criticisms and citations of sources, see Keynes, Ind. Cur. and Fin., pp. 149–155.

[2] For two such tests see E. W. Kemmerer, Money and Credit Instruments in Their Relation to General Prices, second edition, Book II; and Irving Fisher, The Purchasing Power of Money, pp. 276–318.

period under investigation and that the appreciation of the rupee during the period 1893–98 (exclusive of the famine period) was due to the fact that the monetary demand increased more rapidly than the money supply. This is what is meant by relative contraction. The burden of the proof is upon those who deny the application of the apparently universal law of supply and demand to the value of one commodity, *i.e.* money. To disprove it, in the case of India, they must not only satisfactorily measure the variations in India's monetary supply for the period 1893–98, but also those in her monetary demand.

CHAPTER IV

The Fowler Committee's Investigation and Report

Now that we have considered the chief facts of the period of transition from the silver standard to a quasi-gold standard, we may proceed to a consideration of the efforts to clinch the new gold par and place India definitely and permanently upon the gold basis. The various plans proposed, and the policies subsequently adopted, were formulated in the investigation and report of the Indian Currency Committee of 1898, *i.e.* the "Fowler Committee."

Indian Government's Proposals for Stabilizing Exchange

The Indian Government on March 3, 1898 sent a long communication to the Secretary of State for India laying down a program for future action as regards Indian currency.[1] This communication refers to "the pressing necessity of taking active measures to secure the stability of exchange which was the main object of the policy adopted in June 1893." It said that "Our experience since 1893 has put beyond doubt one of the main principles upon which the legislation of that year was based — a principle which was challenged at the time — namely, that a contraction in the volume of our silver currency, with reference to the demands of trade, has the direct effect of raising its exchangeable value in relation to gold."[2]

The difficulty of clinching the new par and stabilizing exchange were discussed, and also the evils of the existing in-

[1] Correspondence Relating to Proposals on Currency Made by the Government of India, Cd. 8840 of 1898, pp. 2–11.

[2] Ibid., p. 2.

stability and uncertainty. "Under these circumstances," the Government said, "we believe that it will be wiser not to pursue a course of inaction which may be prolonged indefinitely, and that it is desirable in the interests of the state and of the mercantile community to terminate the period of transition without further delay."[1] The Indian Government's proposal was to establish a gold reserve by means of borrowing, and then to withdraw from circulation and melt down a sufficient quantity of rupees to raise the gold value of the rupee to 16*d.* The reserve would be augmented by the sale of the silver bullion obtained from the melting down of the rupees. Exchange was to be maintained at the 16*d.* rate by the confidence the reserve would inspire and by the actual redemption of rupees in sovereigns at the 16*d.* rate.

The Fowler Committee

About a month after the receipt of the above communication from the Indian Government the Secretary of State for India appointed a committee of eleven men, of which Henry H. Fowler was Chairman, to make a report on the whole subject of Indian currency. The Committee held 43 meetings, examined 49 witnesses, and in other ways collected a large amount of evidence on the subject. Its report with the testimony and other evidence was submitted to the Secretary of State for India, July 7, 1899.

The investigation showed much difference of opinion to exist. Speaking broadly, there were four main proposals: (1) to adopt bimetallism; (2) to return to the silver standard; (3) to adopt a form of the gold standard without gold coin in circulation; (4) to go directly upon the gold standard, with gold coin in circulation, either by the method suggested by the Indian Government or by some other method. Let us consider each of these proposals, paying

[1] Ibid., p. 5.

particular attention to the third, which was the stone the builders rejected but was later to become the head of the corner.

Bimetallism

At the time of the appointment of the Herschell Committee, in 1892, there was a very strong sentiment among people familiar with Indian currency problems in favor of international bimetallism as the solution of India's currency troubles. It was because the attainment of an international agreement seemed hopeless that India had accepted her second choice and had closed her mints in 1893. During the following years there had been a revival of sentiment in Europe and America in favor of international bimetallism. The subject of free coinage had been the campaign issue in the United States in 1896, one party favoring national bimetallism if an international agreement could not be obtained, and the other being opposed to national bimetallism but favoring a renewal of the attempt to secure international bimetallism. The Republican Party had won, and, following its platform pledge, had appointed a commission known as the Wolcott Commission, from the name of its chairman, Senator E. O. Wolcott, to confer with representatives of European countries on the subject of an international bimetallic agreement. France was in favor of coöperating with the United States on the basis of a ratio of $15\frac{1}{2}$ to 1, and the English Government, being at the time under the influence of men favorably disposed toward bimetallism, appeared favorable to the proposition of India's joining with France and the United States in such an agreement. England seemed disposed also on her own account to make certain concessions to silver. In fact she took a much more favorable stand toward bimetallism than she had taken in any of the earlier negotiations.[1] When the proposals were submitted to India, how-

[1] "We will re-open the Indian mints, we will engage that they shall be kept open, and we shall therefore provide for a free coinage of silver within

ever, the Indian Government, much to the surprise of bimetallists, rejected them. This it did largely because they seemed to require a ratio of $15\frac{1}{2}$ to 1 or 16 to 1, whereas her new ratio was 22 to 1, and the readjustment to such a low ratio, through the increased gold value it would give the rupee, seemed likely to cause great disturbances in Indian business and finance. To further experimentation in the line of currency reform the Indian Government was naturally not favorably disposed at a time when the country was suffering grievously from famine and border warfare, and was only beginning to see light in the currency reform she had undertaken a few years before.[1]

In 1898, however, there were still many who believed that the best solution for India's currency difficulties was an international bimetallic agreement, and who held that India had rejected the proposals of the Wolcott Commission too quickly and without adequate consideration. They believed that a compromise on the ratio difficulty would have been possible between India, France, and the United States, and even hoped that a renewal of negotiations might lead to a satisfactory bimetallic agreement.

Concerning those who advocated delay in going definitely to the gold standard in order that an international bimetallic agreement might be reached, the Fowler Committee confined itself to stating "that, the negotiations of 1897 with France and the United States of America having proved fruitless, no fresh proposals, so far as we are aware, have been, or are being, made by any of the governments concerned." [2]

the limits of the British Empire for a population greater in number than the population of Germany, France, and America put together." Mr. Balfour, First Lord of the Treasury. Cf. Fowler Com. Rep. Evidence, Q. 11650.

[1] For a brief account of the Wolcott Commission's activities and the attitude of India toward its proposals, see Henry B. Russell, International Monetary Conferences, pp. 459–463.

[2] Fowler Com. Rep., sec. 19.

Return to Silver Standard

In the evidence and testimony submitted to the Fowler Committee much was said in favor of a return to the silver standard.[1] Such a policy was more particularly favored by persons interested in India's export trade, who believed, for the reasons hereafter discussed,[2] that a rising exchange was unfavorable to export trade, and especially, that it handicapped India in its competition with China and other silver standard countries for European markets.[3] The condition of India's foreign trade during the period of the "raising" of the rupee, however, had been so abnormal, because of the famine and other troubles, that no additional evidence of value in support of their conclusion could be offered. Moreover, it was clear that were the mints to be reopened there would be a great fall in exchange, accompanied of course by a rise in silver, and that this fall in exchange would cause great disturbance to business, to equities as between debtor and creditor, and to the government finances. Obviously, if such a policy should become at all probable, there would be a rush to withdraw capital from India before the anticipated decline in exchange should take place — a rush which would of itself cause an abrupt fall in exchange rates.[4] This latter danger was a serious defect in the scheme proposed by some of returning to a silver basis gradually. H. D. MacLeod referred to the pro-

[1] Cf., for example, testimony of W. H. Cheetham, Fowler Com. Rep. Evidence, Qs. 8685–8692.

[2] Infra, pp. 479–483. Cf. also supra, pp. 24–28.

[3] Cf. Fowler Com. Rep., sec. 20.

[4] Sir John Lubbock favored the reopening of the mints to the free coinage of silver, but proposed to protect the rupee by increasing the import duty on silver, and by imposing a high seigniorage charge on coinage; these two measures, coupled with the appreciation of silver which he thought the reopening of the mints would cause, he believed would prevent any undue depreciation. Ibid., Evidence, Qs., 11084–11086, 11155–11158. Cf. also Testimony of Thomas North Christie and W. M. Leake, Qs. 4424–4581, and 4870–4877.

posal for reversing the policy of 1893 and reopening the mints as "little short of madness." [1] The proposal was unanimously rejected by the Fowler Committee.

A Gold Standard Without a Gold Currency

Various proposals were made favoring a gold standard without a gold currency. The advocates of these schemes in general maintained that silver was better suited to India's domestic currency needs than gold, and that if a mechanism could be devised whereby rupees and rupee notes could continue to be the currency of domestic trade, but could be maintained at a parity with gold through a mechanism that would make possible the settlement of trade balances with other countries in gold, India's needs would be most effectively and economically met. To this end the two most important plans recommended were the Probyn Plan and the Lindsay Plan.

The Probyn Plan. This plan was advocated by Mr. Lesley C. Probyn, who had been in the Indian government service for twenty-five years ending with 1879, his last post having been that of Accountant General of Madras. The Probyn Plan was suggested to the Gold and Silver Commission as early as 1886, and was formulated in considerable detail in a paper read by Mr. Probyn before the East India Association in June 1888; later, in 1892 in a paper read before the Institute of Bankers, [2] in 1894 in a paper read before the East India Association, and in 1895–96 in papers published in the *Asiatic Quarterly Review.* In its various formulations the Plan was revised, and was finally presented to the Fowler Committee in the testimony of Mr. Probyn of July 18, 1898. [3] It is from this last formulation that the following description is chiefly drawn.

[1] Ibid., Q. 12932.

[2] These papers have been reprinted by Probyn in his book on Indian Coinage and Currency, op. cit.

[3] Fowler Com. Rep., Evidence, Qs. 6818–7055.

Mr. Probyn claimed that a gold currency in India was "not only unnecessary but, in the first instance, at any rate, undesirable. . . . If gold coins were put into circulation the temptation to hoard them and to use them as ornaments would be very great. . . . If gold coins were passed into the currency it would be at first almost like pouring water into a sieve."[1]

His Plan contemplated the introduction of a new government note to be issued in the denomination of R. 10,000 and in exchange for gold. Notes of smaller denominations were to be issued in exchange for gold or for silver rupees, but at first were to be redeemable only in silver rupees. As trade demands increased, exchange would rise to the gold import point and gold would be presented at the currency reserve offices, at first probably against the issue of the large gold notes.

"But gradually, as need arose, gold would come against the issue of smaller notes, thus practically freeing the silver rupees held in the currency reserve. And this process of the expansion of the rupee currency to meet the wants of the people would go on automatically. . . . There would be no power to touch this gold reserve, except for . . . restricted silver coinage, and if the currency gradually expanded without a contraction of the paper issue, the gold reserve would gradually rise. The scheme prohibits gold coinage, and though it does not prevent the receipt of gold at government treasuries, it does not provide for gold (except the large 10,000-rupee notes) being legal tender. Provision is made that when any further coinage of silver rupees takes place, the difference between the nominal and intrinsic gold values of the silver coins shall be added to the gold reserve. The scheme empowers, but does not require, the Government, after the gold in the reserve (other than in the gold note reserve) has continuously for one year been more than silver, to notify that gold will be always given in exchange for rupees or notes presented for the

[1] Fowler Com. Rep., Evidence, Q. 6849.

purpose in parcels of 10,000 rupees. When the Government is able to issue such a notification, a perfect gold standard will have been attained." [1]

The Probyn scheme was not favorably received either by the Indian Government or by the Fowler Committee. In commenting upon the proposal the Indian Government said:

"We do not think it either desirable or necessary that gold coins should, until the gold standard has for some time been established, pass to any appreciable extent into general circulation. . . . But we do not think it necessary . . . to refuse to have legal tender gold coins of a convenient value. We are, moreover, not satisfied that there would be any smaller disappearance into hoards of the gold bars, which would be easy to subdivide, than of gold coins. We are also of opinion that the simpler and more direct a monetary standard can be made, the more acceptable it will be to the public. We think that the only state of things which can be called a thoroughly satisfactory attainment of a gold standard is one in which the gold coins which represent our standard are those also which are good for payments in England." [2]

The Fowler Committee objected to the plan on the ground that there was no successful European or Indian precedent in support of such a use of gold bullion, and that the danger of gold coin being hoarded in India in large quantities was exaggerated. "The habit of hoarding," therefore, the Committee declared, "does not present such practical difficulties as to justify a permanent refusal to allow India to possess the normal accompaniment of a gold standard, namely, a gold currency." [3]

The Lindsay Plan. Of much greater importance was the second plan for securing a gold standard without a gold

[1] Ibid., Q. 6858.

[2] Letter to Secretary of State for India, March 3, 1898, in Correspondence respecting Proposals on Currency Made by the Government of India Cd. 8840 of 1898, p. 10.

[3] Fowler Com. Rep., sec. 51.

currency. This Plan, which provided for a system of redemption in drafts on a gold fund located outside of the country, was named after its chief advocate, A. M. Lindsay, deputy secretary and treasurer of the Bank of Bengal. It appears to have been first proposed for India by Mr. Lindsay in 1876. It was discussed by him in the *Calcutta Review* for October 1878, and July 1885; also in the *Bankers' Magazine* (London) of August and September 1892. In the latter month Mr. Lindsay published a pamphlet on the subject, entitled *Ricardo's Exchange Remedy, a Proposal to Regulate the Indian Currency by Making it Expand and Contract Automatically at Fixed Sterling Rates with the Aid of the Silver Clause of the Bank Act.*[1] The scheme was described and supported by Charles MacDonald in November 1892, in his testimony before the Herschell Committee, and was briefly mentioned among "various schemes" in the Herschell Committee's Report.[2]

The basic principle of his plan Lindsay claimed he drew from Ricardo's recommendations for the resumption of gold payments by the Bank of England through the redemption of its notes in gold bullion — a form of gold which would not circulate.[3] Referring to Ricardo's proposal and its subsequent enactment into law,[4] Lindsay said:

"The currency at that time was based on inconvertible notes of the Bank of England, and Mr. Ricardo suggested

[1] This pamphlet of 36 pages was published in London by Effingham Wilson & Co.

[2] Herschell Com. Rep., sec. 144, and Evidence, Qs. 579–584, 589–592.

[3] Cf. Ricardo, Proposals for an Economical and Secure Currency, etc., especially chapter 4. Published in McCulloch's edition of Ricardo's Works.

[4] The law of 1819 provided that the Acts restraining cash payments by the Bank were to be continued until May 1, 1823, at which date they were to cease; that between February 1 and October 1, 1820, the Bank should pay all notes presented to it at the rate of an ounce of gold for each £4 1*s.* (the par rate being £3 17*s.* 10½*d.*); between October 1, 1821, and May 1, 1821 the rate should be £3 19*s.* 6*d.*; and between May 1, 1821, and May 1, 1823 the rate for gold bullion should be £3 17*s.* 10½*d.* Statutes of Realm, Vol. LIX, p. 156; cf. also Andréadès, History of Bank of England, p. 241.

that stability in the foreign exchanges might be secured and all legitimate requirements met by the simple and economical expedient of arranging that the Bank of England should sell its paper money at a fixed gold price, and buy back the notes when desired at $1\frac{1}{8}$ per cent below that price, the gold employed to be in the shape of gold bars or any other form that would prevent its being used as a medium of local payment. He said a currency is in its most perfect state when it consists of cheap material, but of cheap material of an equal value with the gold which it professes to represent; and he added that a currency of this description might be equally well issued by a Government as by a Bank. . . .

"This proposition of Mr. Ricardo was recommended by the Committee of the House of Lords and Commons appointed in 1819, to consider the expediency of the Bank of England resuming gold payments, and was afterwards adopted on a temporary footing in the Bill for their resumption, introduced by Sir Robert Peel. From 1st February, 1820, to 1st May, 1823, the value of our paper currency was raised gradually and successfully from its degraded position to the old fixed standard of £3 17*s*. $10\frac{1}{2}$*d*. paper money to the ounce of gold, by making the notes convertible into gold bars, that could not be used in the internal circulation. This short trial is the only one ever given to Ricardo's scheme, and it passed through the ordeal satisfactorily. The arrangement appears to be in every respect a suitable precedent for the Government of India to follow, as a temporary expedient at all events; and it is the duty of the Indian authorities to consider carefully whether this scheme of currency, which was devised by our greatest currency authority, not merely as a temporary remedy, but as a permanent measure of reform, should not be adopted in India on a permanent footing." [1]

Inasmuch as the Lindsay Plan and the currency problem it was formulated to solve underwent modifications during the period between the Plan's original formulation and its

[1] Ricardo's Exchange Remedy, pp. 6–7.

advocacy before the Fowler Committee in 1898; and since the limits of this paper will not permit a discussion of the historical development of the Plan, it will be advisable to examine it in the form described by Mr. Lindsay in 1898.[1]

"When formulating this scheme, years ago," said Lindsay, "I based it on the legislation of 1819, but, simply for the sake of convenience and economy, I substituted sterling drafts on London for the gold bars of the Ricardo plan. It was with pleasure that I discovered, last year, that the sterling draft system had been in operation in Scotland for 40 years,[2] and had been recommended for adoption in Ireland by a strong parliamentary committee in 1804."[3]

The Lindsay Plan, which has since received the name of the "Gold-Exchange Standard," provided for the immediate accumulation by the Indian Government through a long-time loan (say for 15 years) of £10,000,000.[4] This was to constitute a gold standard reserve fund, most of which should be kept on deposit by the Government of India in London, preferably in the Bank of England, but part of which should be kept in rupees in government treasury offices in India — some in Bombay and some in

[1] Fowler Com. Rep., Evidence, Qs. 3275-4303.

[2] "After the Peace of Versailles in 1763, a great scarcity of gold was experienced in Scotland. . . . Exchange with London fluctuated 5 or 6 per cent, and, in order to fix exchange and frustrate the attempts of speculators, the Scotch banks established a gold fund in the Bank of England; and, by offering drafts on London at ½ to 1 per cent over the speculators' rate, they gradually brought the exchange to par, and with the aid of this conversion fund they maintained exchange at this level up to 1804, and until gold coins were again used." Lindsay, Fowler Com. Rep., Evidence, Q. 3360.

[3] Ibid., Q. 3359.

[4] Lindsay believed that this reserve could be reduced to £5,000,000 if the Government would impose a prohibitive duty on the importation of silver, which he favored. He believed that the recent heavy imports of silver were used largely for the illicit coinage of rupees of the Native States, and that these counterfeit coins circulated "on large tracts of territory that border these Native States all through India, and displace British rupees, thereby creating a redundancy of the British rupee currency." Ibid., Qs. 3399, 4076-4078, 4219-4231.

Calcutta.[1] This fund was to be a separate and trust fund to be used only for the purpose of maintaining the parity of the rupee with sterling at the rate of 16*d.* to the rupee.[2] The Government was to offer to sell on demand both in Bombay and Calcutta drafts on the gold standard reserve in London for sums of £1000 and upwards, at the fixed rate of 15¾*d.* to the rupee; and in London to sell, on demand, drafts on Bombay and Calcutta for sums of 15,000 rupees and upwards, at the fixed rate of 16⅛*d.* to the rupee.[3] The Indian rate of 15¾*d.* was supposed to represent approximately the gold-export point of India. In other words, it was assumed that, if India were placed upon a gold standard with gold coins in circulation, the expenses involved in securing gold in India and shipping it (in large sums) from Calcutta to London would be about ¼*d.* for each 16*d.* Under a strict gold standard therefore London demand exchange could drop to 15¾*d.*, and no further; for at that rate gold would be exported, the currency supply would be reduced, and the further decline in exchange would be stopped. Lindsay's plan was to give the "would-be gold exporter," not gold to export, but a draft on the Government's gold fund located in London and held as a deposit in the Bank of England, and to deduct from the value of the draft ¼ penny on each 16*d.* to cover the expenses (interest in transit, freight, insurance, etc.) which the "would-be gold exporter" would have incurred had he been compelled to ship gold from India to London. The rupees which he would pay for these drafts were to be

[1] Ibid., Qs. 3382–3390.

[2] There were frequent suggestions of other rates, especially the rates of 15*d.* and of 14*d.* While Lindsay claimed that his plan would work as well with one rate as another, he preferred decidedly the 16*d.* rate.

[3] These gold standard reserve sales of drafts were to take the place of the importation and exportation of bullion, and, being monetary operations rather than fiscal, were to be independent of the Government's fiscal operations in the sale of council bills. On the subject of the relation between the sale of council bills and of gold standard reserve drafts, see Lindsay's testimony, Fowler Com. Rep., Evidence, Qs. 3760–3787.

physically withdrawn from circulation and tied up in the Government's gold standard reserve vaults in India, thereby reducing the country's circulation as effectively as it would have been reduced had the equivalent in gold coin been withdrawn from active circulation and shipped to London. This withdrawal of rupees from circulation would reduce the relative redundancy of the currency and tend to force exchange back toward the 16*d.* par. When exchange turned in favor of India, and rose to the gold-import point, which Lindsay considered to be $16\frac{1}{16}d.$,[1] the Bank of England was to stand ready to sell the "would-be gold importer" into India, not sovereigns nor rupees for shipment to India, but rupee drafts on the rupee part of the gold standard reserve held in Calcutta or Bombay, giving him title thereby to the rupees already laid down in India. The presentation of the draft in India would release the rupees from the treasury vaults and put them into circulation, thereby increasing the amount in circulation as effectively as the importation of an equivalent amount of gold coin or rupees would have increased it.

Ordinarily the drafts sold in London on the rupee part of the gold standard reserve would be demand drafts, but in case the rupee fund were low, Lindsay suggested that usance drafts might be sold, which would allow time for the Government to purchase silver in London, ship it to India, and have rupees minted before the drafts would mature. Other methods for meeting this difficulty in case of emergency would be to make transfers between the gold standard reserve and the government Paper Currency Reserve so that the bullion in process of shipment and coinage could be

[1] The reason for placing the gold-import point only 1/16*d.* above par, while the gold-export point was placed 1/4*d.* below par, appears to have been to make it so low that there would under no circumstances be any temptation to ship gold to India for the purpose of securing rupees. In this connection it should be remembered that gold on its way from Australia to London could be "sidetracked" to India very cheaply. Fowler Com. Rep., Evidence, Q. 3406.

credited to the Paper Currency Reserve and a corresponding amount of notes or rupees transferred from that to the rupee part of the gold standard reserve in Calcutta or Bombay.[1]

This mechanism, Lindsay maintained, was just as automatic as the strict gold standard and was more economical, better suited to Indian conditions, and involved less disturbance to existing customs. There were only three uses for gold coin in India, he said, and they were (1) hoarding, (2) internal circulation, (3) settlement of foreign balances.

The great Indian evil of hoarding he believed would be greatly increased as far as gold was concerned if gold coin were made readily accessible to the people by being placed in circulation. Redemption of rupees in gold in India therefore by feeding the hoards would require a much larger supply of gold than would redemption in gold drafts.[2]

So far as domestic circulation was concerned, Lindsay claimed that the people were familiar with rupees, and that rupees were better suited to the trade of the country than gold would be. There was no need of gold money in India, but there was a great need of a gold standard in which the public would have perfect confidence. For the securing of the gold standard the all-important requirement was convertibility. Effective convertibility required no more than that gold should always be available in London at a fixed rate against rupees paid in India, for the settlement of India's debit balances. This would prevent the rupee currency from becoming to any large extent relatively redundant and from depreciating in its gold value. On the other hand, rupees should always be available in India at a fixed rate against gold paid into the reserve in London, for the settlement of India's credit balances. This would prevent the rupee currency from becoming relatively scarce to any considerable extent and from appreciating

[1] Ibid., Evidence, Qs. 3389, 3390, and 4038.
[2] Cf. ibid., Qs. 3580–3582.

in its gold value. These needs, Lindsay claimed, could be met just as well and just as automatically by the sale of drafts as by the shipment of gold, and at a substantially less expense.

Lindsay gave seven positive reasons why London was preferable to Indian cities as a place for the keeping of the gold part of the proposed gold standard reserve. They were:

"First, . . . that the gold is really required only for settlement of the balances of India's foreign indebtedness, and as London is the one great centre for settlement of international indebtedness, it would be the most convenient spot both for receipt and payment of the gold. Secondly, there must be more or less uncertainty as to the quantity of gold or sterling money required as a conversion fund, and gold or sterling money can always be borrowed in London at short notice, whereas there would be no facilities for prompt replenishment in India. Thirdly, the establishment of the fund in India would withdraw gold from London, whereas its location in the Bank of England would strengthen the great central reserve of the Empire. Fourthly, India is a hoarding country, and if her currency is made convertible on the spot into gold coins, or even into gold bars, and these bars are always exchangeable on the spot into currency, there is a danger that the gold bars and coins will be absorbed into hoards and kept there, instead of rupees bearing extrinsic value. Fifthly, the location of the reserve in India might create a monetary crisis under exceptional circumstances. Although London can obtain gold in a few days' time, both from Paris and Berlin, yet a monetary crisis occurs here now and then, because the gold is not obtainable promptly. India is protected as a rule from these crises by the system of council wire transfers; but these are not always available, and, looking to the great distance between London and India, the issue of fresh currency should not be delayed until gold can be imported. Sixthly, under ordinary circumstances (*i.e.* except during or shortly after periods of redundancy), the gold paid by the public into the conversion fund will

be for the purchase of new rupees, and part of the gold will, therefore, be used by Government in the purchase of silver for the Mint. As silver can best be bought in London, it is desirable that Government should receive the gold there. If the gold is received in India, and the silver bought there, not only will Government have to buy in a small and unreliable market, but two metals will be sent to India when one only, viz. silver, is wanted. Seventhly, the object of the scheme is to prevent the use of gold as currency in India, and to confine its use in connexion with the Indian currency to the settlement of the balances of India's foreign indebtedness; and it is pure waste of time and money to bring gold out to India merely for the purpose of having it sent back."[1]

It was stated above that Lindsay proposed to inaugurate the gold standard reserve with an initial sum of £10 millions secured by a loan.[2] Why was this amount chosen? Lindsay's reasoning was that the demands for drafts on the gold standard reserve would come almost entirely from the presidency banks of India, — the banks in which the balances of the exchange banks are largely held,[3] — and that they would normally come during India's slack season, which reaches its height about November. Comparing the cash balances of these presidency banks for a recent period of years, he found that the extreme variations were from 10½ crores to 3½ crores, or 7 crores (the equivalent of about £4.7 millions).[4] He reasoned that the banks could not well afford to let their cash reserves run below this minimum of about 3½ crores, and that therefore a gold standard reserve fund sufficient to relieve the Indian money market of 7 crores of rupees and leave a fair margin of safety would be sufficient. To be on the safe side, he

[1] Fowler Com. Rep., Evidence, Q. 4056.

[2] The amount could be reduced if his proposed prohibitive tax on the importation of silver were levied. Cf. supra, p. 82, note 4.

[3] Fowler Com. Rep., Evidence, Qs. 3567 and 4167.

[4] Ibid., Q. 3933.

doubled this maximum annual range of the reserves of the presidency banks and arrived at the round sum of £10 millions. This amount, he said, would be sufficient to meet any demands on the reserve that would be at all probable. The £10 millions would be slightly more than enough (at $15\frac{3}{4}d.$ to the rupee) to redeem 15 crores of rupees. Lindsay suggested, however, that before any great emergency should reduce the gold reserve to the "apprehension point" a part of the rupees accumulated in the reserve in India should be sold in London as silver bullion, and the gold balance in London be reënforced from the proceeds. Such a sale, he calculated, would readily provide an increase in the gold reserve sufficient to redeem a further 5 crores of rupees (about £2.9 millions), so that the suggested reserve would be adequate for the withdrawal from circulation and redemption of 20 crores of rupees.[1] The probabilities were extremely remote, Lindsay believed, of any redundancy taking place that could not be cared for by the withdrawal from circulation of 20 crores of rupees.[2] Should such a contingency arise — and it would be more likely to arise under a strict gold standard than under his scheme — he proposed as a last resort that the Indian Government should float a short-time loan in London for replenishing the reserve.[3]

[1] In case exchange became strongly unfavorable to India, and the locking up in the reserve vaults of 9 crores of rupees against sales of drafts on London proved insufficient to relieve the redundancy, Lindsay said the situation and procedure would be as follows: "With a £10,000,000 reserve fund there would be 9 crores of rupees in the Indian Gold Standard offices, and only £4,000,000 sterling in the London Gold Standard offices. This might be taken as apprehension point, so half of the 9 crores of rupees would be melted, and the bullion sold in London for sterling money, which would be deposited in the London Gold Standard office. If sold at 26*d.* per ounce, the bullion would fetch about £1,500,000, and the London reserve would become £5,500,000. By repeating this melting operation, the rupee currency might be contracted to the extent of about 20 crores with a £10,000,000 reserve fund." Ibid., Q. 3769.

[2] Ibid., Qs. 3528–30.

[3] Ibid., Q. 3458.

Objections Raised to the Lindsay Plan. Such were the essentials of the Lindsay Plan. Against it many objections were brought, each of which Lindsay answered with forceful logic. It will be useful to consider briefly the more important of these objections and Lindsay's replies:

(1) The Indian Government, after saying that the Lindsay plan had much to recommend it, said:

"Our main reason for deciding not to adopt it is that it would involve us in a liability to pay out gold in London in exchange for rupees received in India to an indefinite extent. Even if the ultimate liability were not greater than under our own scheme, still its extent, from time to time, would be quite beyond our control, and we can easily conceive that we might find ourselves unable to discharge it on certain quite possible suppositions as to the market rate of exchange and as to the comparative redundancy of the existing volume of the rupee currency. Mr. Lindsay, it appears to us, does not give sufficient weight to one fundamental necessity of our position, namely, that we must remit, in the contrary direction to that in which the offer suggested by Mr. Lindsay would be operative, an annual sum of about £17,000,000 [by means of council bills] to discharge our sterling liabilities." [1]

In reply to this argument, Lindsay maintained that the liability was not unlimited, since the amount of rupees that could be taken out of the exchange market for the purchase of government drafts, without causing such a scarcity of money as automatically to stop the withdrawal of money from circulation, was limited. Furthermore he said that the maintenance of the value of the rupee and of confidence in its future stability would require redemption in either gold or gold drafts, and that under the Indian Government's scheme for redemption in gold in India, the liability

[1] Letter of Secretary of State for India, March 3, 1898, in Correspondence respecting the Proposals on Currency Made by the Government of India. Cd. 8840 of 1898, sec. 28.

of the Government would be much greater than under his scheme, since the public would make demands on the Government's reserve not only to secure gold for settling trade balances, but also to secure gold for hoards and internal circulation.[1]

(2) A second objection to the scheme related to the effect upon confidence in India of the provision to locate the gold reserve in London. On this point Sir James Westland said in his memorandum on the Lindsay scheme:

"The public will regard with distrust arrangements for the establishment of a gold standard in India which carefully involve the location of the gold reserve in London and its use there by trade. A gold reserve intended to support the introduction and maintenance of a gold standard in any country ought to be kept in the country if it is to produce its full effect in the way of establishing the confidence which is almost indispensable to the success of the measure. If the Indian gold reserve is located in London and the public believe that it may at any time vanish in supplying the requirements of trade or of the Secretary of State, confidence will hardly be established; and in any case it seems certain that a reserve of any named amount will produce a greater effect if it is located in India than if it is six thousand miles away." [2]

In reply to this criticism Lindsay said:

"My answer, in the first place, with regard to the distrust is this. It is only people who send out capital to India that are concerned in this matter; the people who work with local capital in India will be very much in the same position as they are at present. The token rupees are all they want. It is those who send out capital to India that should be inspired with confidence, and these people will, in my opinion, have greater confidence if the gold

[1] Fowler Com. Rep., Evidence, Qs. 4059 and 4060.

[2] Correspondence respecting the Proposals on Currency Made by the Government of India. Cd. 8840 of 1898, p. 18.

is here in London. Then, with regard to the gold vanishing in supplying the requirements of trade or of the Secretary of State, I would say that there is much greater danger that the gold that Sir James Westland proposes to introduce into circulation in India may vanish, because in addition to supplying the requirements of foreign remittance and the Secretary of State's drafts, the gold would be liable to be used in internal circulation, and to be taken into hoards. Here the gold is reserved for one of the three purposes for which gold is required in connexion with currency. It will be used solely for the purpose of fixing exchange, and will, therefore, be employed in the manner best calculated to inspire confidence in the stability of exchange." [1]

(3) Sir James Westland criticized the Plan on the ground that it did not give the Government sufficient control over the exchange situation. Lindsay replied that this freedom from governmental intervention and manipulation was one of the great merits of his scheme. It would work as automatically, he claimed, as a gold standard with gold currency.[2]

(4) A fourth objection of some weight was raised by Sir David Barbour. It was the evil effect on the Indian currency that would result from a panic in the city of London at a time when India's gold standard reserve was largely tied up in a deposit account at the Bank of England. In reply Lindsay pointed out that the Peel Act had been suspended more than once during a crisis; and that the Indian demands on the gold standard reserve in the Bank of England would not be so much demands for gold to be withdrawn from the Bank as demands for credit to be transferred from one account in the Bank to another. A gold currency system or any other system, he said, is likely to break down in exceptional circumstances, *e.g.* the suspension of bank-note convertibility in France during the

[1] Fowler Com. Rep., Evidence, Q. 4057.
[2] Ibid., Qs. 4063–4066.

Franco-Prussian War; and that the temporary suspension of the convertibility of rupees into sterling drafts would be excusable as a last resort during a crisis.[1]

Into the further arguments we need not go. The reader will find a number of them discussed in the citations already given. Suffice it to say that, despite the strength of Lindsay's reasoning, the Fowler Committee rejected his Plan.[2]

The Indian Government's Proposals

We may now return to a consideration of the Fowler Committee's attitude toward the Indian Government's proposal for the melting down of a large number of rupees (perhaps 24 crores) so as to force exchange to the 16*d.* par, and for the accumulation of a gold reserve and the immediate establishment of a gold standard with gold in circulation.

The opposition to the Government's proposal to secure a further relative contraction of the currency by melting down a large number of rupees had been strong both in India and in England.[3] Fortunately, before the Fowler Committee was ready to make its report, Indian exchange had reached 16*d.*, with considerable promise of permanence, and over £2⅓ millions in gold had been paid to the Government of India for the purpose of obtaining rupees.[4] This situation removed the need of melting rupees to attain

[1] Fowler Com. Rep., Evidence, Qs. 3572–3574.

[2] Ibid., sec. 54.

[3] Said the [London] Economist when the proposal was made: "To put it bluntly, the Indian market is to be tortured into procuring the gold necessary for the carrying out of the Government's plan. . . . Commerce is to be starved that rates of exchange may be forced up. And the starvation must be keen if it is to serve its purpose. If 10 and 12 per cent rates for money have failed to attract gold, what rates must suffice in order to cause it to flow in in such volume as to fill the void caused by the withdrawal of, say, 10 or 20 millions of silver coin? Not only so; the Indian money market is to be constantly under the thumb of the Government, which can turn the screw on as and when it chooses, and is to be so kept in a state of constant uncertainty." LVI, 1898, p. 684.

[4] Fowler Com. Rep., sec. 39.

the 16*d*. par. "Automatically, therefore," said the Report, "existing currency arrangements sufficed not only to maintain without monetary stringency a steady gold standard in 1898–99, but also to initiate a gold reserve in India, to serve as a bulwark for the maintenance of the gold standard in future years." [1] The Fowler Committee, however, formally considered the Government's recommendation to melt down rupees and refused to adopt it.[2]

Fowler Committee's Attitude concerning Gold Coin and a Gold Reserve

As to the introduction of gold coins into circulation in India, the Fowler Committee said: "We are in favor of making the British sovereign a legal tender and a current coin in India. We also consider that, at the same time, the Indian mints should be thrown open to the unrestricted coinage of gold on terms and conditions such as govern the three Australian Branches of the Royal Mint."[3]

Although favoring the accumulation of a special gold reserve out of the seigniorage profits on rupee coinage, for maintaining the parity of the rupee, the Committee was opposed to the Indian Government's assuming any obligation to redeem rupees in gold on demand. The assumption of such an indefinite liability it considered dangerous. None the less, the Committee said:

"We regard it as the principal use of a gold reserve that it should be freely available for foreign remittances whenever the exchange falls below specie point; and the Government of India should make its gold available for this purpose, when necessary, under such conditions as the circumstances of the time may render desirable." [4]

[1] Ibid , sec. 40.

[2] For discussion of the proposal and reasons for its rejection see ibid., secs. 43–47.

[3] Ibid., sec. 54.

[4] Ibid., sec. 59.

The unwillingness of the Government to assume a positive obligation for the maintenance of the gold parity of the rupee, at a definite rate through a definite promise to convert rupees into gold on demand, brought an element of uncertainty and distrust into the Indian currency situation which has continued to this day, although it reached its peak in the crisis of 1907–08.[1] It is evident that either the Government must establish a gold reserve and assume clearly and fully the responsibility for maintaining the parity of the currency by redeeming rupees on demand in gold or gold exchange or it must pass on to the public the unassumed part of the burden of carrying the risk of depreciation. In the latter contingency the public will nearly always exaggerate the risk it is carrying, for it is likely to underestimate the Government's feeling of moral responsibility. The Government, as the representative of the entire public, and as the body best situated to secure thorough knowledge of currency and credit conditions throughout the country, is the body that should assume this full responsibility. A positive assumption of such a burden is likely to be much more effective, and in the long run less expensive, than a half-hearted assumption of the risk unaccompanied by a positive commitment.

A 16d. Gold Par Recommended

The Fowler Committee favored (though not unanimously) the 16*d.* rate, to which it believed Indian prices had adjusted themselves. It rightly said that the weight of the argument rested upon those who were proposing a different rate, since any change would involve disturbances; and it did not find the arguments in favor of any other rate at all conclusive.[2]

[1] Cf. infra, pp. 118–121.
[2] Fowler Com. Rep., secs. 65–69.

CHAPTER V

INDIAN CURRENCY FROM 1899 TO 1907

THE period from the Fowler Committee Report in the summer of 1899 to the outbreak of the American panic in the fall of 1907, with its accompanying heavy drains on India, is one of importance in the history of India's currency system. It is not, however, very important to the person who is studying that history chiefly for the light it throws upon monetary principles. That being our object in this study, it will be sufficient to summarize briefly the chief features of the period. They may be grouped under three heads: (1) The prosperity of India and the increasing demand for rupees. (2) The mechanism by which the new supplies of rupees and rupee-notes were brought into circulation and their parity with gold maintained. This will involve a discussion of the functioning, during the period, of the Paper Currency Reserve and the gold reserve, and a consideration of the changing character and location of these reserves. (3) The progress made in the direction of introducing gold into the Indian circulation.

Prosperity of India and Increasing Demand for Rupees

The period as a whole from 1899 tq the fall of 1907 was one of great prosperity for India, although the fiscal years 1900–01 and 1901–02 were characterized by the Plague and by a disastrous famine. Some evidence of the prosperity will be afforded by the figures summarized in the following table.

ECONOMIC PROGRESS OF INDIA, 1899–1908[1]

ITEM	FISCAL YEAR ENDING MARCH 31									
	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
Production										
(*a*) Cleaned Rice, estimated yield (000,000 cwt.)										
Amount	506	452	414	384	461	439	448	433	428	379
Index number	100	79	82	76	91	87	89	86	85	75
(*b*) Wheat Production, estimated (000,000 tons)										
Amount	6.8	5.3	7.2	6.1	7.9	9.6	7.6	8.6	8.5	6.1
Index number	100	78	106	90	116	141	112	126	125	90
(*c*) Tea Production,[2] estimated (000,000 lbs.)										
Amount	157	182	197	191	189	209	221	221	241	244
Index number	100	116	125	122	120	133	141	141	153	155
(*d*) Cotton Production, estimated (400 lb. bales, 000,000)										
Amount	2.8	1.0	2.7	2.6	2.7	3.8	3.9	4.2	4.9	3.9
Index number	100	36	96	93	96	136	139	150	175	139
(*e*) Cotton and Jute Goods, estimated yarn spun (000,000 lbs.)										
Amount	503	502	343	560	559	556	556	656	631	614
Index number	100	100	68	111	111	111	111	130	125	122

[1] Figures are compiled from the Statistical Abstract relating to British India, *passim;* and from the appendices of the Rep. Roy. Com. Ind. Fin. & Cur. Index numbers are computed on the basis of the figure for 1899 as 100.

[2] Figures for calendar years.

ECONOMIC PROGRESS OF INDIA — *Continued*

Item	Fiscal Year Ending March 31									
	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
(*f*) Cotton Cloth, estimated amount woven (000,000 yds.)										
Amount	99	95	96	116	123	138	159	164	159	181
Index number	100	96	97	117	124	139	161	166	161	183
(*g*) Goods and Minerals conveyed by railway systems of India, estimated (000,000 tons)										
Amount	40	43	43	46	48	52	55	58	62	62
Index number	100	107	107	115	120	130	137	145	155	155
Prices [1 2]										
(*h*) Atkinson Index Numbers of Indian Prices	100	96	114	111	102	98	96	107	125	133
(*i*) Sauerbeck Index Numbers of British Prices	100	106	117	109	97	108	116	113	120	125
Foreign Trade										
(*j*) Merchandise Exports (£000,000)										
Value	74	70	79	84	95	101	106	111	129	100
Index number	100	95	107	114	128	136	143	150	174	135

[1] Inasmuch as the other figures are for fiscal years ending March 31, and as the price figures are for the calendar years, the price index numbers given are those for the year preceding the one designated at the head of the column. The calendar year 1898 for example corresponds more nearly to the fiscal year ending March 31, 1899 than to that ending March 31, 1898.

[2] To facilitate comparison, index figures for prices have been adjusted to the basis of the calendar year 1898 as 100.

ECONOMIC PROGRESS OF INDIA — *Continued*

ITEM	FISCAL YEAR ENDING MARCH 31									
	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908
(*k*) Merchandise Imports (£000,000)										
Value	49	47	55	53	54	61	66	72	79	87
Index number	100	96	112	108	110	124	135	147	161	178
(*l*) Gross Earnings of Railway Systems of India (£000,000)										
Value	20	21	22	23	24	26	28	29	32	30
Index number	100	105	110	115	120	130	140	145	160	150
General Index Numbers										
(*m*) Average Index Number of Products (*a* to *g*)	100	89	97	103	111	125	127	135	140	131
(*n*) Average Index Number of Foreign Trade and Railway Transportation (*j* to *l*)	100	99	110	112	119	130	139	147	165	154

Eliminating variations due to changes in the value of the monetary unit, by employing only units of physical quantity, and using as the criterion of economic development a simple average index number of the seven items: (1) production of rice, (2) production of wheat, (3) production of tea, (4) production of cotton, (5) amount of cotton and jute yarn spun, (6) amount of cotton cloth wove, and (7) quantity of goods conveyed by railroad systems of India, we arrive at the figures given in horizontal column *m* of the table, which it will be noted show an increase of 40 per cent from 1899 to 1907, despite the decline during the famine period of 1900 and 1901.

At this time India was on a gold standard, the actual unit of value being 1/15 of a sovereign or about 7.53 grains of pure gold. These were years during which the value of gold was depreciating the world over, chiefly as a result of the large gold production in South Africa, and gold prices were rising in all gold standard countries. The Sauerbeck index numbers for British prices (horizontal column *i* of table) rose 20 per cent from 1899 to 1907. If the Indian price level was to keep in equilibrium with the price levels of other countries it must also rise. Referring to the Atkinson index numbers of Indian prices, we find that for the same period, 1899–1907, they increased 25 per cent. The result was that not only were there more goods to be exchanged in India in 1907 than in 1899 (horizontal columns *a* to *g* of table), but that those exchanges were necessarily made at a higher price level. This twofold increase in the demand for money is evidenced by certain general criteria of trade which cover both products and prices, like merchandise exports, merchandise imports, and gross earnings of the Indian railway system. The combined index numbers for these three items (horizontal column *n* of table) show an increase from 100 in 1899 to 165 in 1907. Inasmuch as in India the great bulk of the business is effected by means of cash rather than by bank checks, and as under the inertia of oriental custom there is probably little change in the rate of monetary turnover from year to year (except in times of famine), this large increase in business to be transacted at a higher price level required a great influx of rupees into the Indian circulation.

The New Supply of Rupees and the Mechanism by Which its Gold Parity was Maintained

The official figures show this period to have been characterized by a phenomenal increase in the amount of money poured into India's circulation. They are as follows:

Year	Rupees and Small Silver Coins Minted in India[1]	Net Currency Notes in Circulation (*i.e.* Currency Notes Issued, less Amounts in Government Treasuries and less Silver in Paper Currency Reserve)[2]
	R. 000,000	R. 000,000
1898–99	2.5	77
1899–00	22.3	195
1900–01	172.6	126
1901–02	51.3	231
1902–03	113.9	180
1903–04	165.3	195
1904–05	113.7	206
1905–06	200.0	216
1906–07	260.8	223
1907–08	181.1	133

Aside from the small amount of recoined rupees, these large amounts of rupees coined each year could only be issued against their equivalents in gold paid to the Indian Government at the rate of a sovereign for 15 rupees (or approximately that), and, inasmuch as the security part of the Paper Currency Reserve was constant at approximately R. 100 millions down to 1906 and at R. 120 millions in 1906 and 1907, the net increase in the currency notes (uncovered by silver), as given above, also represented deposits of gold. The fact is that during this period the Indian Government was literally flooded with gold presented for the purchase of rupees and currency notes, and its problem soon became the problem of a plethora and not a scarcity of gold. Let us consider a few of the chief facts in this movement.

Issue of Currency Notes in India against Sovereigns and Silver Bullion Deposited in London. Early in 1898 a small sum of gold was paid into the Paper Currency Reserve in

[1] Exclusive of that coined for native states. Figures were computed from Statistical Abstract relating to British India, 38th number, p. 89 and 48th number, p. 89.

[2] Figures were computed from App. VIII, Tables 1 and 2, of Rep. Roy. Com. Ind. Fin. & Cur.

India for the purchase of rupees at the rate of 15 rupees to the sovereign under authority of Act VIII of 1893. This Act of 1893 had been supplemented by Act II of 1898, intended to be but temporary, which authorized the issue of paper currency notes in India against gold deposited with the Secretary of State at the Bank of England in London and earmarked in the Bank as part of the Paper Currency Reserve. The origin of this plan of issuing paper currency notes in India against gold deposited in London, and later even against silver bullion purchased in London for the coinage of rupees in India, is explained in a memorandum submitted by the Indian Financial Secretary to the Royal Commission on Indian Finance and Currency.[1]

As a result of the practical discontinuance of rupee coinage during the period 1893–98, of the Indian famine of 1896–97, and other causes, the balances of the Indian Government in India were very low in 1898. Trade, however, was improving, and demands for remittances to India were heavy; discount rates at the Presidency Banks of Calcutta and Bombay were 11 and 12 per cent respectively, and cable transfers on India were selling in London at $16\frac{5}{32}d.$ — approximately the gold-export point for London. It was to meet this crisis that the above-mentioned Act (Act II of 1898) was passed as a purely temporary measure. Under it "the proceeds of the Secretary of State's sales of council bills could be set aside at the Bank of England in gold as part of the Indian Paper Currency Reserve. The Government of India could issue notes against the gold so set aside, and with them could meet *pro tanto* the Secretary of State's drafts, without reducing their treasury balances."[2] It was only as a temporary matter that any of the Paper Currency Reserve was to be held in London, for the Act provided that the gold so set apart by the Secretary of State in London should be held by him "until he shall trans-

[1] Ibid., App. VIII, pp. 241–242. [2] Ibid., p. 241.

mit the same, or what he shall determine to be equivalent to the same, in gold coin or gold bullion to India, or until the Government of India shall appropriate and set apart in India as a part of the Currency Reserve . . . an amount of coin of the Government of India equal in value to such notes." This measure adopted by the Government a year before the Fowler Committee made its report recommending the rejection of the Lindsay Plan — a recommendation accepted by the Indian Government — was in reality a substantial step in the direction of Lindsay's proposal. It was the sale of exchange in London by the Secretary of State on the Paper Currency Reserve in India, at rates representing practically the gold-export point for London, with the primary object of releasing currency to meet monetary demands in India. A few months later the Act was extended by Act VIII of 1898 for two and a half years. In 1900 (by Act VIII) it was extended two years more and provisions were added authorizing the Secretary of State to use the gold so received by him for the purchase of silver bullion to be transmitted to India for coinage purposes, and authorizing further the counting of such bullion in transit and in process of coinage as part of the Paper Currency Reserve. In this way the holding of a part of the Reserve in London was made to serve a threefold purpose: (1) The provision of funds in the world's central silver market for the purchase of silver when needed for the coinage of new rupees — one of the advantages claimed by Lindsay for his Plan. (2) The use of a fund in London to support Indian exchange when the trade balance was against India and it became impracticable, or seriously depressing to exchange, to sell council bills. In such contingency the Secretary of State could have passed to his credit gold from the Paper Currency Reserve in London, in lieu of selling council bills, and could transfer from his funds in India an equivalent to the Indian part of the Paper Currency Reserve. (3) Its

use, as previously noted, as a fund into which payments might be made against the issue of currency notes in India, thereby preventing exchange from rising unduly high and leading perhaps to the undesirable shipment of gold to India. By Act IX of 1902 the main provisions of this legislation were made permanent. It was not, however, until the fiscal year 1906 that the policy was inaugurated of keeping part of the gold of the Paper Currency Reserve permanently in England.[1] By the end of the fiscal year 1905, the amount of gold accumulated in the Paper Currency Reserve in India as the result of deposits against the payment of currency notes and rupees was about £11 millions, and at that time there was no gold to the credit of the Paper Currency Reserve in London. This appeared to be an undue proportion of gold to be kept in the Reserve in India, especially since the amount of silver in the Reserve in India was running very low — only about half as much as the gold — and the demand for rupees was continuing strong. Accordingly £5 millions were shipped to London, and "it was subsequently decided to aim at holding not less than that amount normally, in London."[2] Since 1906 every year has shown a substantial part of the Reserve in the form of gold in England.[3]

The authority granted early in 1898, therefore, to create temporarily a branch of the Paper Currency Reserve in London, was the beginning of a movement which soon became strong in favor of transferring India's monetary reserves to London. Once transferred there, the next step was to invest them in increasing proportions in sterling securities instead of keeping them in the form of "earmarked" gold in the Bank of England or in the form of

[1] Cf. table showing amount, composition, and distribution of Paper Currency Reserve, annually, 1862–1913, in Rep. Roy. Com. Ind. Fin. & Cur., App. VIII, pp. 248–249.

[2] Memorandum of Finance Secretary, in Rep. Roy. Com. Ind. Fin. & Cur., App. VIII, p. 242.

[3] Ibid., pp. 248–249.

ordinary deposits in the Bank. How this tendency showed itself in connection with a second reserve — The Gold Reserve Fund — from the very time of its inauguration will now briefly be considered.

The Gold Standard Reserve. The paramount object which the Fowler Committee set before the Indian Government and which that Government approved was "the effective establishment of a gold standard" in India. It will be recalled that the Committee recommended that "fresh rupees should not be coined until the proportion of gold in the currency is found to exceed the requirements of the public,"[1] and that "any profit on the coinage of rupees . . . should be kept in gold as a special reserve, entirely apart from the Paper Currency Reserve and the ordinary treasury balances." The Fowler Committee clearly had in mind the ultimate use of this gold reserve which was to be accumulated out of seigniorage profits, as a redemption fund for the maintenance of the parity of the rupee at the 16*d.* par.[2] In 1900 the Government of India decided that the time had arrived for putting into effect the recommendation of the Fowler Committee to form a special gold reserve from the profits of rupee coinage. It put forth its proposals in a dispatch (No. 302) of September 6, 1900 to the Secretary of State for India.[3] This dispatch, together with the appended minute by Sir Edward Law, shows that the Government of India, like the Fowler Committee, contemplated that this new gold reserve should be a redemption fund consisting chiefly of gold and located in India; and that the Paper Currency Reserve should gradually revert to its original status of a fund consisting chiefly of rupees and securities to be used for the encashment of currency notes.[4] In the above-mentioned dispatch the Viceroy said:

[1] Fowler Com. Rep., sec. 60.

[2] Ibid., sec. 59.

[3] Rep. Roy. Com. Ind. Fin. & Cur., App. V, pp. 109–111.

[4] "The sole object for which the Currency Reserve was originally constituted was to provide the necessary security for the encashment of notes, on

"We . . . consider it desirable that a reserve of gold should be formed outside the Currency Reserve, which will supplement the stock in that Reserve for the present, and will in time take the place of that stock and relieve us of the necessity for keeping anything more than a small amount of gold in the Currency Reserve; this would be in accordance with the view of Lord Elgin's Government that the Reserve should not be used for the general purposes of our exchange policy. We consider the formation of a special gold reserve to be an object of sufficient importance to justify the ear-marking of the receipts from profit on coinage as proposed." [1]

It is unfortunate that this recommendation was not approved by the home authorities. The result of its approval would have been to establish a reserve fund chiefly of gold, at first located in India but probably later transferred largely to London, to be used solely for the maintenance of the parity of the silver rupee with gold at the 16*d.* rate; and the ultimate transformation of the Paper Currency Reserve into a purely note issue reserve consisting of interest-bearing securities and silver rupees, much like the reserve against Bank of England notes. Under this arrangement the function of each reserve would have been distinct and simple, and much subsequent confusion and misunderstanding would have been avoided. India, more-

presentation, and there was certainly no idea of utilizing the funds so held for exchange or any other purpose not directly connected with security for the note issue. . . . The fact is that when the funds in the Currency Reserve were diverted from their original purpose and taken as providing security for the maintenance of a steady exchange, a radical and perhaps uncontemplated change was introduced, and at the risk of being considered somewhat conservative I would venture to suggest that it would be more prudent to revert, as far as possible, to the original conditions as regards the treatment of these funds." To this end, the writer of the above, Sir Edward Law, advocated the removal of most of the gold from the Paper Currency Reserve and the substitution for it of rupees and securities. The gold, he believed, more properly belonged in the "gold exchange fund." Cf. Rep. Roy. Com. Ind. Fin. & Cur., App. V, pp. 117 and 119.

[1] Ibid., p. 111.

over, in her subsequent movement in the direction of the Lindsay Plan would probably have secured a more thorough and automatically working form of the gold-exchange standard than the one she has actually attained.

The Secretary of State, however, although nominally accepting the main provisions of the Government of India's plan for the creation of a gold reserve out of the profits of coinage, actually modified it so as to change the character of the reserve from a gold redemption fund, for the maintenance of the parity of the rupee with gold and the adjustment of the rupee supply to the demands of trade, to a surplus fund invested in sterling securities and held in London as a sort of "secondary reserve." [1] This left the real work of maintaining the parity to the Paper Currency Reserve and the Secretary of State's sale of council bills, with the result that the three funds, viz. the Paper Currency Reserve, the Gold Reserve, and the Secretary of State's balances, soon found their functions confused, the properly fiscal function of the last fund and the properly monetary functions of the other two being sadly mixed.

The Gold Reserve Fund was established without legislation during the fiscal year 1901–02. Into it were to be paid all profits of coinage accruing after January 1, 1901.[2] The Financial Statement of 1901–02 said that it was the intention of the Government "to invest, from time to time, in British consols or other sterling securities, the sums which may be accumulated in the Gold Reserve Fund." [3] With the exception of a special fund equivalent to £4 millions

[1] Cf. Dispatch No. 232 of Dec. 13, 1900. Ibid., pp. 126–128.

[2] The strain on the Government's finances, due to famine, led the Government to use the seigniorage profits of the calendar year 1900 for current requirements, but with January 1, 1901 it commenced paying its seigniorage profits directly into the Gold Reserve. This earlier diversion of seigniorage profits for current fiscal needs led to much criticism, and the Government later expressed its intention of paying into the Reserve as soon as possible the seigniorage profits of 1900 (*i.e.* £1,730,000). East India Fin. Stat. 1901–02, p. 12.

[3] Ibid., sec. 83.

in coined rupees created in 1906,[1] practically the entire Gold Reserve, which by April 1, 1907 had grown to over £13 millions, had by that time been invested in British and colonial government securities and Corporation of London bonds.[2] Concerning the use of the Gold Reserve Fund the Indian Government said in the Financial Statement of 1903–04:

"It will only be when the temporary curtailment of council bills is found insufficient to check a fall in exchange, and when the gold in the Currency Reserve is exhausted, *i.e.*, when the balance of indebtedness is seriously adverse to India to an extent, that we need hardly anticipate, that any serious demand can arise on the Gold Reserve Fund."[3]

The continued heavy demand for rupees, however, soon required something of a change in the composition and function of the Gold Reserve Fund, and led to a change in its name. The Indian Government found itself threatened with the danger of not being able to secure silver and to coin rupees fast enough to meet trade requirements. Silver had to be procured principally from abroad. "From the date when Government decides to buy silver for coinage, down to the date when the new rupees coined therefrom become actually effective for meeting the trade demand, there is an interval of not less than five weeks, which may easily be exceeded."[4] To meet this situation the Government arranged to maintain a special Ingot Reserve of silver bullion in India sufficient to coin R. 30 millions, these ingots to be passed through several of the preliminary stages in the process of minting. The Reserve was accumulated by November 1905, and was to be used

[1] Cf. infra, pp. 129, 132–133.

[2] For statement showing apportionment and location of Fund each year, 1902–12, see Statistical Abstract relating to British India, 48th number (1915), p. 85.

[3] East India Fin. Stat. 1903–04, p. 14.

[4] Ibid., 1905–06, p. 18.

only in times of emergency. From the Financial Statement of the following year[1] we learn that the Ingot Reserve proved of great service, but that the demand for rupees became so large that the Reserve was completely exhausted by the middle of January, and that it was decided to raise it to an amount sufficient to coin R. 60 millions, the coining of which would keep the mints fully occupied for two months. During the fiscal year 1907–08, the demand for rupees continued heavy and the Ingot Reserve as part of the Paper Currency Reserve was discontinued, and a special silver rupee reserve of R. 60 millions was built up out of the profits of coinage as a part of the Gold Reserve Fund, the name of this fund being changed to Gold Standard Reserve Fund, since it was no longer composed entirely of sterling securities and gold.[2]

The Circulation of Gold Coin in India

When the Indian mints were closed in 1893 the Indian Government offered to give 15 rupees for a sovereign, and this rate plus the expenses incident to the shipment of sovereigns to India fixed the upper limit to the appreciation of the rupee in terms of gold. We have found that early in 1898 gold began to be presented in India for rupees, and that, soon after, the Government began to receive gold in London to the credit of the Paper Currency Reserve against payment of rupees in India. The Fowler Committee had recommended that the sovereign be made legal tender in India — a recommendation that was put into effect in 1899 (Act XXII). It had further said:

"Although the Government of India should not, in our opinion, be bound by law to part with its gold in exchange for rupees, or for merely internal purposes, we regard it as the principal use of a gold reserve that it should be freely

[1] East India Fin. Stat. 1906–07, pp. 17–18.
[2] Ibid., 1907–08, pp. 23–26.

available for foreign remittances whenever the exchange falls below specie point; and the Government of India should make its gold available for this purpose, when necessary, and under such conditions as the circumstances of the time may render desirable. . . . When it has accumulated a sufficient gold reserve, and so long as gold is available in its treasury, it might discharge its obligation in India in gold, instead of in rupees." [1]

The Fowler Committee had declared that it looked forward to the time when the sovereign would be coined and circulate at home and in India "under identical conditions." [2] This opinion was shared by the Government of India, for the Viceroy had said in a dispatch of March 3, 1898 to the Secretary of State for India:

"We think that the only state of things which can be called a thoroughly satisfactory attainment of a gold standard is one in which the gold coins which represent our standard are those also which are good for payments in England. . . . What we ought to aim at, and what we have every prospect of successfully attaining, is the introduction of the English sovereign itself as a current coin. . . ." [3]

As previously noted,[4] during the years immediately following the attainment of the 16*d*. par, the demand for rupees became so strong in India that the Government was nearly "swamped (temporarily) by gold." [5] During the fiscal year 1900–01, the Government decided as a tentative measure to hold £5 millions in its reserve in times of low balances and to pay out any gold it received in excess of this minimum. On this basis it began to pay out gold in

[1] Fowler Com. Rep., sec. 59.
[2] Ibid., sec. 54.
[3] Corresp. resp. Proposals on Cur. Made by Govt. of India, 1898. Cd. 8840, pp. 10–11.
[4] Supra, p. 100.
[5] East India Fin. Stat. 1900–01, p. 217.

exchange for rupees on January 15, 1901. Concerning the practice, the Financial Statement of 1900–01 said:

"Government has no intention of forcing gold upon a reluctant public, although, now that the public has spontaneously taken a certain number of sovereigns, we thought it was not unjustifiable to familiarize people more widely with gold by cashing postal orders in presidency-towns of the value of R. 15 or £1 in gold coins, and we also propose to pay certain salaries in gold in the presidency-towns." [1]

After saying that the Government was paying out gold to anybody who asked for it the Financial Statement continued:

"Whether we shall be able to continue to do so without check or interruption, whether now we have once started giving gold for rupees we may not have to suspend temporarily, is not a matter about which confident prediction can be made. But it would be reasonable to say that the auguries are not unfavorable for our being able to pursue the path on which we have entered."

The figures cited, however, showed that from January 15 to March 10 only £130,700 had been taken voluntarily from the currency offices by persons presenting notes. The subsequent absorption of gold into the active circulation was very slow and was practically limited to a few districts.

This same Financial Statement (of 1900–01) said that the Government had decided to constitute a branch of the Royal Mint at the Bombay Mint for the coinage of gold, that the terms had been settled, and that "we are merely awaiting now until the Royal Mint has satisfied itself as regards the Mint premises and appliances at Bombay. A representative of the Royal Mint is starting this week for Bombay to report." [2] Up to the present writing (May 1916), however, the Indian mints have not been opened

[1] East India Fin. Stat., 1900–01, p. 19.
[2] Ibid., p. 19.

to the free coinage of gold — a subject to which we shall return later.[1]

In June 1907, a few months before the great crisis of that year struck India, a committee appointed by the Secretary of State to investigate the subject of Indian railway finance recommended that in lieu of extra borrowing the urgent need of additional rolling stock and other improvements be met by the diversion from the Gold Standard Reserve of £1,000,000 out of the profits on the coinage of rupees in 1907. Although the Gold Standard Reserve in its inception was intended to be a monetary reserve, they erroneously but naturally[2] attributed to it an essentially fiscal function, reasoning that the object of the Reserve was "to enable the Government of India and the Secretary of State to meet their sterling obligations in the event of a falling off in the demand for council bills." Combining the gold and the gold securities in the Gold Standard Reserve and the Paper Currency Reserve, the Committee concluded that in addition to 60 million silver rupees there was at that time "a fund of upwards of £23,000,000 in sterling securities and gold bullion which could be drawn upon in case of necessity."[3] This sum it believed was sufficient to justify the diversion of the £1,000,000 of additional seigniorage profits to railway expenditures. The Secretary of State for India, however, was more than pursuaded; for, despite very strong protests in India, he directed that for the future one half of any profits on the coinage of rupees should be used for capital expenditure on railways until the Gold Standard Reserve reached £20 millions. It seems to have been contemplated that after that total had been reached all the profits on silver coinage should be diverted from the Reserve.[4] The Secretary diverted £1,123,000 in this way,

[1] Infra, pp. 143–146.

[2] This was a natural error in view of the Government's confusion of the functions of the Secretary of State's balances and of the two monetary reserves, as previously noted. Supra, pp. 104–106.

[3] Rep. Roy. Com. Ind. Fin. & Cur., sec. 35.

[4] Ibid., sec. 36.

and refused to follow the recommendations of the Government of India in favor of accumulating the sterling securities in the Gold Standard Reserve to £20 millions before diverting any further seigniorage profits to railway capital expenditure. In a telegram of July 2, 1907 to the Indian Government the Secretary said: "The danger, which you allege, of a fall in the rate of exchange I regard as illusory, having regard to the present conditions of trade, the amount of securities in the Gold Standard Reserve, and of gold in the Currency Reserve."[1]

The situation, however, was suddenly changed by the crisis of 1907.

[1] Rep. Roy. Com. Ind. Fin. & Cur., App. V, p. 159.

CHAPTER VI

CRISIS OF 1907–1908

IN the latter part of 1907 and the forepart of 1908 the Indian gold standard was put to its first severe test. From the attainment of the 16*d*. par in 1898 to August 1907, exchange rates had fluctuated between the "gold points," and the demand for new rupees had been so strong that the greater part of the time exchange had ruled above 16*d*.[1] Beginning with August 1907, there occurred for India a combination of unfortunate circumstances that brought the country to the verge of a financial panic and forced exchange slightly below the gold-export point — in other words caused a temporary depreciation in the unit of value. This crisis led to important changes in the Indian currency system.

There were several important forces leading to the slump in Indian exchange rates and to the unprecedented demands on India's gold reserves. They were: (1) Unfavorable prospects for the jute trade. "The crop [in August 1907] was expected to be a good one, but prices had fallen greatly, buyers were holding off, and there was no outflow of money into the jute districts as in the previous year."[2] (2) De-

[1] In 11 of the 16 half-year periods, 1899–1900 to 1906–07, the average rate for the Secretary of State's drawing of bills and telegraphic transfers was above 16*d*., and the lowest half-yearly average for the other five half-years was 15.93*d*. Rep. Roy. Com. Ind. Fin. & Cur., App. VII, Table III.

[2] East India Fin. Stat., 1908–09, p. 22.

Jute, raw and manufactured, is normally India's greatest export. From £28.4 millions in 1906–07 the exports of jute fell to £24.2 millions in 1907–08. Stat. Abs. relating to Brit. India, 48th number, 1915, p. 192.

ficient rains. By September it became apparent that the fall rains were deficient over a large part of India and particularly in the wheat-growing provinces, and by the end of October it was clear that the export trade in wheat would be insignificant. Cotton was uncertain, and there were prospects "that much of the Burma rice might have to be diverted to India instead of going abroad." [1] (3) Financial crisis in the United States. In the latter part of October the financial crisis occurred in the United States with its consequent heavy demands upon the gold of the rest of the world. The Bank of England raised its discount rate on November 4th to 6 per cent and on November 7th to 7 per cent — the first 7 per cent rate since 1873. (4) Famine. The failure of the monsoon in the autumn of 1907 threatened famine for a large section of India, and within a short time a disastrous famine broke out, covering districts containing a population of approximately 49 million people.[2] (5) Decline in gold price of silver. For the period 1903–07 India's monetary demand for silver had been the chief factor in causing the phenomenally high price of the white metal.[3] It soon became apparent that India would not only cease to buy silver for monetary purposes, but that she might actually have substantial supplies to unload on the market. Considering the extreme sensitiveness of the silver market in recent years it was not surprising that there should be a sudden collapse in the price of the white metal. The average monthly price of standard silver in London fell from 31.68*d.* for August 1907 to 26.24*d.* for December 1907. This decline in the price of silver for ornaments, trinkets, and the like, was a stronger temptation than the natives of India (outside of the famine districts) could stand, and India's unfavorable trade balance was

[1] East India Fin. Stat., 1908–09, pp. 22–23.

[2] Ibid., p. 3.

[3] Kemmerer, The Recent Rise in the Price of Silver, etc., in Quar. Journ. Econ., XXVI, 1912, p. 230.

rendered worse by large importations of silver bullion, with the effect of still further weakening exchange.[1]

One of the first results of the events of October and November 1907 was the destruction of the Secretary of State's market for council bills. On November 6th tenders for council bills dropped to $15\frac{29}{32}d.$, and the Secretary of State sold only a very small amount.

> "Thereafter for five weeks he practically withdrew from the market altogether; but the scarcity of gold and the absence of exports continued, and exchange ceased to be stagnant and moved steadily downwards. On the 13th November it fell to $1\text{–}3\frac{13}{16}$, on the 18th to $1\text{–}3\frac{3}{4}$, and on the 25th to $1\text{–}3\frac{11}{16}$. This was the lowest point reached during the crisis."[2]

It was a point at least $\frac{5}{16}d.$ below the gold-export point, and represented a depreciation to that extent in the gold value of India's monetary unit.

How Did the Government Meet the Emergency?

To meet this emergency the Government adopted several measures:

First. As already noted, the Secretary of State reduced his sales of council bills and then for a period of five weeks practically discontinued them. Inasmuch as the sale of council bills acts upon Indian exchange like an equivalent amount of Indian imports, and as the encashment of the bills from the treasury funds in India releases money from government depositories, the practical discontinuance of sales tended to harden exchange rates. This advantage, however, was gained at the fiscal disadvantage of cutting off

[1] In October 1907, said the East India Financial Statement of 1909–10 (p. 19): "London despatched to Bombay the largest shipment [of silver], I am told, which had ever left England for India; and this record was again broken in December."

[2] East India Fin. Stat., 1908–09, p. 23.

the Secretary of State's income for meeting India's fixed charges in London. To provide him with funds in London, it became necessary between November 25th and December 18th to transfer to him £$2\frac{1}{2}$ millions from the currency chest in London in exchange for an equivalent rupee credit passed to the Paper Currency Reserve in India.[1]

Second. The second step was to abandon the policy which had been in operation for about seven years of paying out gold freely on demand in exchange for rupees. On this subject the Finance Member of the Viceroy's Council said that the Government of India was approached by different parties who wished to find out if it would be willing to issue sovereigns in exchange for rupees at the rate of 16*d.*, the understanding being that the sovereigns were wanted for export. The matter, he said, was fully considered and

"the theoretical arguments in favour of a liberal issue of gold as an antidote to a fall in exchange were freely admitted. But it was felt very strongly that the depression was not due exclusively to the contraction of exports. The demand for gold was made in part in the interest of our own trade; but it was also due in great measure to the American crisis and the latter factor was clearly one that had to be seriously reckoned with. . . . Our whole supply of gold [in India] was only about $3\frac{3}{4}$ millions [pounds], of which only some 2 millions was at Bombay and Calcutta, and this was already being drawn off at the rate of about £400,000 a month *for internal consumption.*[2] Had we complied with the demand for issues without limit, the whole available supply might have been drawn off in a few weeks, and we should then have been forced to discontinue them, with the possible result of precipitating a panic. For these reasons, we decided to stand by our legal rights. We are not bound to give sovereigns in exchange for rupees, except at our own convenience, and we do so primarily *only to foster the internal use of gold.*[2] The currency offices

[1] East India Fin. Stat., 1908–09, p. 23.
[2] Italics are mine.

were accordingly instructed not to issue gold in larger quantities than £10,000 to any individual on any one day."[1]

Third. The third measure, and by far the most important one because of its bearings on India's monetary future, was a notification given to the presidency banks the latter part of December but not made public,

"that, if exchange (which in the meantime had recovered) should again fall below gold export point, telegraphic transfers on London should be offered for sale in India at a fixed rate. . . . The amount of transfers was to be limited to a defined though reasonably substantial figure, and Government reserved to itself the fullest discretion to withdraw the offer at any moment without notice. The arrangement remained in force till the last days of February [1908], but no occasion arose for putting it into operation. At the end of that month it was modified . . . to the extent that bills on London would be offered for sale, instead of [telegraphic] transfers, the rate being suitably modified."[2]

Trade conditions continued strongly unfavorable during the first seven and a half months of the calendar year 1908.[3] On the 25th of March exchange again dropped below the gold-export point,

"and on the following morning a notice was published that the Government of India were prepared to sell sterling bills on London at 1*s.* $3\frac{29}{32}$*d.*, up to a limit of £500,000. The offer was continued until the close of the famine and the improved agricultural prospects restored exchange to normal health. The practice was to offer £500,000 every week, raising the amount to £1,000,000 on occasions when the market seemed to require additional assistance. There were only two weeks in which the tenders exceeded our allotments, and it is believed that the requirements of all

[1] East India Fin. Stat., 1908–09, p. 23.
[2] Ibid., pp. 23–24.
[3] Cf. East India Fin. Stat., 1909–10, p. 19.

genuine remitters were adequately met. Applications for bills stopped in the middle of August. . . ."[1]

During the five months April to August 1908 the Government sold these "reverse council bills" to a total amount of £8,058,000, resulting in the withdrawal from circulation of R. 120 millions.

For the purpose of effecting this redemption of rupees and their withdrawal from circulation, the Government utilized only the gold in the Paper Currency Reserve in India and in England, which it considered its first line of defense, down to the latter part of March 1908; but during the succeeding five months the Gold Standard Reserve was drawn upon heavily, and securities in that Reserve to the face value of £8,100,497 were sold, while at the same time all accruing interest was disbursed.

The net changes in the two reserves are shown in the following table compiled by Dr. H. R. Read from figures furnished him by the Indian Office in London.[2]

PAPER CURRENCY RESERVE

Date	Securities (Purchase Price)		Coin and Bullion					
			In India			In England		
	Held in India	Held in England	Gold Coin and Bullion	Silver Coin	Silver Bullion under Coinage	Gold Coin and Bullion	Silver Bullion	Silver Bullion in Transit
	Rupees 000,000	Rupees 000,000	Rupees 000,000	Rupees 000,000	Rupees 000,000	Rupees 000,000	Rupees 000,000	Rupees 000,000
July 31, 1907	100.0	20.0	60.1	214.1	5.7	93.1		10.2
August 31, 1908	100.0	20.0	14.3	285.4	7.9	25.6		

[1] East India Fin. Stat., 1909–10, p. 19.

[2] Unpublished doctoral dissertation on The Development of a Qualified Gold Exchange Standard in India, p. 178.

GOLD STANDARD RESERVE

DATE	SILVER PORTION OF FUND IN INDIA	NOMINAL VALUE OF SECURITIES HELD IN ENGLAND
	Rupees 000,000	£ 000,000
July 31, 1907 . . .	60.0	14.4
August 31, 1908 . .	172.5	7.3

FUNDS OF SECRETARY OF STATE FOR INDIA

DATE	CASH BALANCES IN INDIA	HOME TREASURY BALANCES
	Rupees 000,000	£ 000,000
July 31, 1907 . . .	171.4	6.0
August 31, 1908 . .	155.0	1.8

The striking facts brought out by this table, if one combines the two reserves,[1] are: (1) The great depletion of the gold — coin and bullion — (held exclusively in the Paper Currency Reserve), both in India and England. The total amount declined from R. 153.2 millions (£10.2 millions), July 31, 1907 to R. 39.9 millions (£2.7 millions), August 31, 1908.[2] (2) The decline in the security portion of the Gold Standard Reserve from a nominal value of R. 216 millions[3] (£14.4 millions) to R. 109.5 millions (£7.3 millions). (3) The maintenance without impairment of the nominal value of the security portion of the Paper Currency Reserve at R. 120 millions (£8 millions). (4) The phenomenal increase in the reserve holdings of silver coin and bullion. These holdings increased from R. 290 mil-

[1] In this emergency the two reserves (viz. Paper Currency Reserve and Gold Standard Reserve) were used for essentially the same objects and for our purposes may be considered as one reserve.

[2] The Indian "Home Treasury" balances of gold also declined from about £6 millions to £1.8 millions.

[3] This is the cost price. Doubtless there was some depreciation during the crisis, but for that data are not given.

lions (£19.3 millions), July 31, 1907 to R. 466 millions (£31.1 millions), August 31, 1908.

At the end of the crisis therefore, it will be observed, the Government held in its two reserves £2.7 millions in gold coin and bullion, over £15 millions in securities (rupee and sterling), and 176 millions of rupees in excess of what it held July 31, 1907, an amount which if sold as bullion would have yielded to the reserves probably at least £4 millions in gold.[1] Furthermore, the rupees redeemed by this £4 millions could likewise have been melted and sold as bullion, thereby replenishing the reserve — a procedure which in extreme emergency could have been continued for some time, although there would have been an obvious limit. The figures show clearly, however, that at the end of the crisis the Indian Government still possessed a substantial reserve power and that it could have withstood a much severer crisis. None the less, the lesson that the Government wisely drew from the crisis was that substantial additions to its gold reserves should promptly be accumulated.[2]

In this emergency did the Indian Government measure up fully to its responsibilities? The answer, I believe, must be in the negative. The Government's unwillingness to commit itself positively to the redemption of rupees on demand in unlimited quantities greatly weakened public confidence. When the stability of the country's unit of value is threatened it is the Government and not the business public that should "walk the floor." In England, a generation ago, Walter Bagehot made "current" the philosophy that

[1] This sum of rupees at full weight would have contained 47.3 million ounces of British standard silver. The lowest price of prompt silver in London for the period January–August 1908 was 23⅝*d.* per ounce. If one should discount this arbitrarily by 10 per cent to allow for the depressing influence on the market of heavy rupee sales, for abrasion, and for forward delivery, he would arrive at £4,191,000 as the proceeds of the sale of these rupees as silver.

[2] Cf. The Gazette of India, Extraordinary, March 22, 109, pp. 19–26.

in the time of threatened panic the Bank of England should give the public to understand that it would lend freely to all responsible applicants who would pay the price. Only in that way could confidence promptly be restored. The same principle should have been applied in India in the early part of the crisis of 1907, and had it then been applied promptly and vigorously the demands upon the reserves would probably have been much smaller than they actually were, and India would almost certainly not have been humiliated by having its currency actually depreciate, even for a day.

The policy of redeeming the rupees in India in gold needlessly increased the Government's burden, for it resulted, as Lindsay previously had prophesied,[1] in large demands for gold being made for hoards and internal circulation, which depleted the reserve without helping in any considerable degree the exchange situation. Had India from the start accumulated its gold reserves in London and limited its redemption of rupees, under an official public announcement, to the sale on demand to all comers of sterling drafts at the gold-export point, without limit as to quantity, the demand for gold for hoarding and for internal circulation would have been eliminated from the demand on the reserves, and a smaller sum would almost certainly have been required for the maintenance of the parity of the rupee. It will be recalled that Lindsay's careful estimate showed that a gold reserve of £10 millions under his Plan could have provided under extreme circumstances for the redemption and withdrawal from circulation of R. 200 millions.[2] In this crisis of 1907-08 the amount withdrawn was but R. 176 millions, while the available redemption funds (gold and gold securities) in the two reserves at the end of the crisis were much larger than £10 millions, *i.e.* £16.6 millions[3] (nominal value), exclusive of the securities held in India.

[1] Cf. supra, p. 91. [2] Cf. supra, pp. 87-88. [3] Cf. supra, Table, pp. 118-119.

One of the most successful measures adopted by the Indian Government to meet the crisis of 1907–08 was the belated one of redeeming rupees in sterling drafts on London, at the exchange rate representing the gold-export point, and the withdrawal from circulation of the rupees received in payment for such drafts. Prior to the crisis, it will be recalled, the Government had been paying out rupees and rupee notes in India against deposits of gold in the Paper Currency Reserve in London at rates representing India's gold-import point, and as early as 1904 the Secretary of State had announced his willingness to sell council bills in unlimited amounts at the rate of $16\frac{1}{8}d.$ The plan now adopted, as a result of the difficulties of 1907–08, of selling "reverse council bills" provided for conversion in the opposite direction, *i.e.* the conversion of rupees into gold drafts.[1] Henceforth the Indian currency could be contracted as well as expanded by the draft selling mechanism, and the gold value of the rupee could thereby be maintained between the gold points. Thus were adopted the essential features of the Lindsay Plan which had been formally rejected a decade previous. But the adoption of this system of redemption was only a half-hearted one. There were no commitments to redeem on demand, the functions of the two reserve funds and of the Secretary of State's cash balances were still confused, and the policy of keeping a gold reserve in India was by no means given up. The rates, moreover, at which drafts should be sold in either direction were not statutory but purely administra-

[1] Previously when exchange had turned strongly against India the policy of the Secretary of State had been either to limit, or discontinue temporarily, the sale of council bills. If this did not restore the rate, the shipment of gold from India by the Government to meet the Secretary of State's requirements, commercial shipments of gold by private individuals, and the diversion to England of gold in process of shipment from Australia to India usually quickly forced exchange back in the direction of par. Cf. East India Fin. Stat., 1902–03, p. 13.

tive, and the efforts were apparently to be continued of encouraging the circulation of gold coin in India. None the less a long step had been taken in the direction of Lindsay's gold-exchange standard, and other steps in that direction were soon to follow.

CHAPTER VII

INDIAN CURRENCY SINCE THE CRISIS OF 1907–1908

SINCE India's fairly successful weathering of the crisis of 1907–08, her currency problem has centered chiefly in: (1) The Gold Standard Reserve: its enlargement, location, change in form so as to render it more readily mobilizable in times of emergency; and the placing upon a more definite basis of the system of redemption in drafts. (2) Increase in the issue of the currency notes, and a further movement in the direction of the universalization of the smaller denominations; also changes in the character and location of the Paper Currency Reserve. (3) A moderate increase in the use of gold coins in the Indian circulation, and agitation in favor of further extending the use of gold coins in India and of opening the Indian mints to the coinage of gold — either sovereigns or 10-rupee pieces. (4) The consideration of various proposals for banking reform in India and particularly proposals for the establishment of a central bank.

The balance of this paper will consist of a brief discussion of the first three of these topics. The fourth topic is somewhat aside from the main subject of the paper and is too large to be considered within the limits of a brief essay on Indian currency.[1] In 1913 another Government Commission made a careful study of India's currency and banking problems and issued a voluminous report, which has already been frequently cited in this book.[2] The report,

[1] For valuble discussion of this topic see Memorandum by J. M. Keynes on Proposals for the Establishment of a State Bank in India. Annexed to Report of Royal Commission on Indian Finance and Currency.

[2] Report of the Royal Commission on Indian Finance and Currency, House of Commons, Sessional Papers, 1914, Vol. XX.

together with the minutes of the hearings and the appendices, is a mine of information concerning the more recent years of India's currency experience, and from it will be drawn many of the facts given in the following pages.

The Gold Standard Reserve

The crisis of 1907–08 taught the authorities several lessons concerning the reserve funds:

Reserve Funds too Small. The first lesson was that the reserve funds were inadequate for the task imposed upon them. It was not that the reserves were exhausted by the crisis; for, as we have seen, there were substantial gold funds when the storm passed — about £16.6 millions in gold and gold securities (exclusive of £1.8 millions in the Secretary of State's home treasury balance). The trouble was that the demand had been so heavy as to cause great anxiety on the part of the Government, lead it to refuse to give in exchange for rupees all the gold or gold exchange requested by the public, and to cause a great decline in the public's confidence in the stability of the Indian gold standard. Furthermore, it was felt that this crisis, while a severe one, was by no means as severe as might come in the future. In 1907–08 the storm center of the crisis was New York, the Indian summer monsoon failed, and the famine was limited to one section of India.[1] If this crisis caused a maximum reduction in India's gold reserves (*i.e.* gold and gold securities) of over £14 millions — £18 millions if one should include the decline in the gold portion of the Secretary of State's home balances — how would India meet a crisis, it was asked, in which the storm center of the panic was London, at a time when the monsoon should fail in two consecutive years — a not unprecedented event — and

[1] The famine area was only about 133,000 square miles, and the population directly affected was about 49 millions. East India Fin. Stat., 1908–09, p. 3.

when the resulting famine should spread over the entire country? Such questioning led to a pronounced movement for a substantial increase in the Gold Standard Reserve. The Secretary of State promptly announced a change in his policy with reference to the diverting of part of the seigniorage profits to railway expenditures. In a memorandum relative to the accounts of the Government of India for 1909–10 and estimates for the two following years, the Under Secretary of State for India said:

"As at present arranged . . . no portion of the [seigniorage] profit will be used for railway purposes unless the sterling assets of the Gold Standard Reserve and the gold held in the Paper Currency Reserve amount together to at least £25 millions." [1]

The Finance Member of the Indian Council referred in his budget speech of 1910–11 to the lessons of the crisis of 1907–09, and the "urgency and importance of building up our gold resources again by every means in our power." [2]

Large Accumulation of Rupees — Coinage Temporarily Discontinued. The heavy withdrawals of gold from the reserves in 1907 and 1908 had their counterpart in heavy receipts of rupees by the Government. Of course this meant that no more new rupees would need to be coined for some time, and therefore that the Gold Standard Reserve would have no accretions from seigniorage profits. In November 1907 when coinage was stopped the Government held R. 280 millions in its two reserves, and by September 1908 this figure had grown to approximately R. 480 millions. After that date there was a steady decline, the rupees being paid out in large quantities against deposits of gold in India or in London. By May 1913 the rupee holdings had been reduced to R. 150 millions, and the Secretary of State once more began the purchase of silver

[1] East India Fin. Stat., 1911–12, pp. 9–10.
[2] East India Fin. Stat. and Budget for 1910–11, p. 18.

for rupee coinage.[1] For the two following years the coinage was so large as to yield the Gold Standard Reserve a seigniorage profit of £5½ millions. The Gold Standard Reserve and the Paper Currency Reserve together in 1914–15 contained £26 millions in gold coin and bullion and £18.5 millions in sterling securities.[2]

Proper Size of Gold Standard Reserve. To the subject of the proper size of the Gold Standard Reserve, the Royal Commission of 1913–14 gave considerable attention. Its conclusion was that the Gold Standard Reserve should be the first reliance for the support of exchange, and that the gold in the Paper Currency Reserve should be resorted to only in so far and so long as the Gold Standard Reserve was not adequate to support the burden itself. The Gold Standard Reserve had not yet, in the opinion of the Commission, reached the figure where it could safely be depended upon as a first line of defense, and the Commission concluded that it would therefore not be useful for them to try to lay down any hypothetical limit beyond which additions to the Gold Standard Reserve should cease. They believed that £25 millions was insufficient, and recommended that the Government for the present should continue to place in the Gold Standard Reserve all seigniorage profits from the coinage of silver and any interest accruing from investments or loans made from the Reserve, until further experience should permit a much more accurate definition of the demands which the Reserve might be called upon to meet.[3]

Location of Gold Standard Reserve. The crisis of 1907–08 greatly altered the function of the Gold Standard Reserve. The Reserve ceased to be an invested surplus or "secondary reserve" to be used only for the purpose of maintaining exchange in times of extreme emergency (with a small portion

[1] East India Fin. Stat., 1913–14, p. 15.
[2] Ibid., 1914–15, p. 29.
[3] Rep. Roy. Com. Ind. Fin. & Cur., secs. 86 and 89.

of the Reserve in India to be used for meeting emergency demands for silver rupees), and quickly became an active redemption fund. For the efficient performance of this redemption function the place for the gold part of the Reserve was clearly London, despite the opposition of many Indian critics. The testimony of both theory and experience was that in times of emergency the redemption of rupees in gold in India is nothing like as effective in restoring exchange as is redemption in sterling drafts, *i.e.* in gold laid down in London.[1] This was the experience of the crisis of 1907–08 during which £4,179,000 in gold was withdrawn by the public from the Paper Currency Reserve in India, apparently with the purpose of hoarding, since only £250,000 were exported during that period on private account.[2] Since the crisis of 1907–08 the conviction has been a growing one that the proper place for the reserve which is to be used for maintaining exchange, when the Secretary of State's operations in council bills fail to do so, is London. The sale in India of "reverse council bills" and of cable transfers on the Gold Standard Reserve in London, when exchange declines to India's gold-export point, has now become an established practice in Indian monetary administration.

Concerning the location of the Reserve the Royal Commission said in its final Report:

"The most suitable place for the location of the Gold Standard Reserve is, in our opinion, undoubtedly London, and in this view the majority of our witnesses concurred. London is the clearing-house of the world, India's chief customer is the United Kingdom, and London is the place where money is required both for the expenditure of the Secretary of State on India's behalf and for payment of India's commercial obligations to this country and the world in general. If the Reserve were kept in India it would have to be shipped to London to be used. This would involve

[1] Cf. supra, pp. 90–91, and infra, pp. 141–142.
[2] Rep. Roy. Com. Ind. Fin. & Cur., sec. 62.

delay at a moment when immediate action is essential. The objections put forward to keeping it in London rest on the belief that the Reserve is regarded in London as being available to supplement the Bank of England's reserve. There is no foundation at all for this belief. We have no hesitation therefore in recommending that the whole of the Gold Standard Reserve should be kept in London." [1]

With a qualification in favor of a rupee portion of the Reserve in India, we can readily accept this judgment of the Royal Commission. It sounds like the words of Lindsay in his testimony before the Fowler Committee in 1898.[2]

Composition of Gold Standard Reserve

It has been previously mentioned that the Fowler Committee, in recommending the establishment of a gold reserve out of the seigniorage profits realized on rupee coinage, apparently contemplated the accumulation of a gold coin redemption fund in India,[3] and that it was such a fund that the Indian Government apparently had in mind in their recommendations of 1900; but that the Secretary of State thwarted this purpose by interpreting the proposed gold reserve to be a sort of invested surplus fund to be held in London as a second line of defense. In 1907, as we have seen,[4] there was developed a branch of this Reserve in the form of a rupee portion (normally 6 crores) held in India to anticipate sudden demands for additional rupee coinage.[5] The crisis of 1907–08, it has been seen,[6] compelled the Government to call upon this second line of defense, with the result that between July 31, 1907 and August 31, 1908

[1] Ibid., sec. 90.
[2] Supra, pp. 86–87.
[3] Supra, pp. 104–105
[4] Supra, pp. 107–108.
[5] The figures for the amount, composition, and location of the Gold Standard Reserve by quarterly periods 1901–13 are tabulated in Statement A, Appendix III of the Rep. Roy. Com. Ind. Fin. & Cur., p 97.
[6] Supra, pp. 118–120.

the nominal value of the securities held in the Reserve declined from £14.4 millions to £7.3 millions, while the rupee portion increased from R. 60 millions to R. 172.5 millions. After the crisis, the rupee portion of the Reserve was gradually reduced against payments of gold into the Reserve either in England or India (including exchanges with other funds), until in 1911 it amounted to slightly less than R. 30 millions. In 1912 the rupee portion was again increased, and by March 31, 1913 it had been brought back to the normal figure of R. 60 millions. Later, on the recommendation of the Royal Commission on Indian Finance and Currency, the rupee portion of the Gold Standard Reserve was discontinued, being transferred to the Paper Currency Reserve in exchange for an equivalent in gold. The reduction of the rupee portion of the Reserve after the crisis meant the reinvestment of most of the Reserve in sterling securities, and we find that the securities in the Reserve at market value increased from £5.1 millions December 31, 1908 to £15.9 millions March 31, 1913. As a result of the lessons of the crisis, however, it was decided to put out part of the Reserve in short-time loans in the London money market to a selected group of highly responsible business houses. These loans were made for the Government by the Indian Office Broker, who received a commission for his services based upon the interest realized on the loans. The loans were secured by collateral, especially preferential terms being given to Indian government securities. By 1909 the amount of the Indian funds, of which the funds belonging to the Gold Standard Reserve constituted part, to be lent on short notice in the London market had grown to such a large figure that it appeared impossible to lend it all out on the specified terms to individual concerns; and the practice was accordingly instituted of placing it out on deposit at interest in certain of the large joint stock banks. At first four banks were selected, but later the number was increased to seven.

The broker was supposed to apportion these funds as nearly equally as practicable, consistently with securing the most favorable interest rates for the Indian Government. Substantial sums were deposited in banks of which the Chairman of the Finance Committee of the Indian Council and two other members were directors, and this led to much criticism of favoritism.[1] No dishonesty has been proven and the evidence seems to show that in these dealings the members of the Finance Committee did not show favoritism toward their own banks. None the less the practice is one that would naturally provoke criticism, and "Cæsar's wife should be above suspicion."

Beginning in December 1912, the policy was inaugurated of keeping part of the Gold Standard Reserve in the form of gold earmarked at the Bank of England. As the idea became accepted of using the Gold Standard Reserve largely as a redemption fund instead of merely as an invested surplus to be utilized only in case of great emergency, the conviction became more and more general that a substantial part of the Reserve should be in gold available on demand. A time of threatened panic is not a favorable time in which to sell securities for gold. In 1912 therefore the Secretary of State began to accumulate a portion of the Reserve in gold earmarked at the Bank of England, expressing his intention to accumulate a gold fund of £5 millions.[2] This accumulation in the Reserve of a substantial sum of earmarked gold was supported by public opinion in India.[3] It was also strongly supported in the testimony before the Royal Commission of Mr. Alfred Clayton Cole, Governor of the Bank of England, who favored raising the sum of earmarked gold to £10 or £11

[1] Cf. S. V. Doraiswami, Indian Finance, Currency and Banking, pp. 34–36; also Memorandum of M. de P. Webb, in Rep. Roy. Com. Ind. Fin. & Cur., App. XXI, pp. 550–554.

[2] Rep. Roy. Com. Ind. Fin. & Cur., App. V, p. 201.

[3] Cf. East India Fin. Stat. and Budget, 1913–14, p. 16.

millions as a precaution against emergency demands.[1] In answer to the criticism that such gold would be absorbed by the London money market, leaving India in the lurch in time of crisis, Mr. Cole said that Indian gold in the Bank of England never appeared in the Bank of England's published account, and that it was quite incorrect to say that the London money market took that gold into account at all. The following quotation from the testimony is apposite: "Chairman, 'Your argument I think is, as I put it just now, that in a time of crisis you do not claim that India should support the London market, but that it should not be an additional drain upon it, and should carry its own burden?' — Mr. Cole, 'It should carry its own burden.'"[2] The Royal Commission in its final Report took the same position, saying:

"We are clearly of opinion that the actual holding of gold in this Reserve has been and is insufficient, and that it is important to take immediate steps for its increase. In our opinion, the best rule in present circumstances would be that not less than one half of the fund should be held in actual gold when the total fund exceeds £30,000,000, and that a minimum amount £15,000,000 should be accumulated as rapidly as possible."[3]

The logic of the situation strongly supports this recommendation.

One step in the direction of the accomplishment of the end recommended by the Royal Commission was the one previously mentioned,[4] namely, the discontinuance of the rupee portion of the Gold Standard Reserve and the further transference to the Paper Currency Reserve of £4 millions in securities in exchange for the equivalent in gold — transactions which would have raised the amount of gold in the Gold Standard Reserve to nearly £10 millions.

[1] Rep. Roy. Com. Ind. Fin. & Cur., Evidence, Qs. 3406–09.
[2] Ibid., Q. 3416.
[3] Ibid., secs. 95–96.
[4] Supra, p. 129.

In the judgment of the writer, the rupee portion of the Gold Standard Reserve should have been continued, not, however, at the expense of the gold portion of the Reserve, but of the invested portion. The proper function of a gold standard reserve is to maintain the parity of the fiduciary silver coins with gold, and the proper function of a paper currency reserve is to maintain the parity of the currency notes with the chief coins of circulation — in this instance, with silver rupees. The maintenance of the parity is a two-sided operation. It involves not only the prevention of depreciation, by redemption and withdrawal from circulation of fiduciary coins when they become relatively redundant; but also the prevention of appreciation, by putting into circulation fiduciary coins in exchange for gold when such coins become relatively scarce. These two functions properly belong to the same fund — a fund which would be constant (except for accruing profits and increasing circulation of fiduciary coins), inasmuch as gold would never be paid out of it in London or in India except as the equivalent in rupees was paid in, and rupees would never be paid out in India except as the equivalent in gold was paid in either in London or in India. The Paper Currency Reserve, on the other hand, has performed its proper function when it has provided for interconvertibility on demand in convenient places in India of rupees and rupee notes.

Of course it is perfectly proper, in order to distribute the funds most effectively in the various reserves and in the Secretary of State's balances among the places and in the forms most needed, to arrange for the swapping of debits and credits among the various funds. Aside from this, however, the different funds should be distinctly separate in location and function, and only in very great emergencies should one reserve be called upon to support another reserve or to perform the legitimate function of another.

Convertibility

The movement favoring the increase in the size of the Gold Standard Reserve, and the change in its form so as to make it more promptly available when needed, was naturally accompanied by a demand for greater certainty that the rupees could be converted into gold or gold exchange on demand and in unlimited quantities. We have already noted the failure of the Indian Government to meet this need in the crisis of 1907–08, and the unfortunate consequences of this failure, in diminishing the public's confidence in the Indian currency.[1] That lack of public confidence in the rupee persists to this day. "Experience proves," said M. F. Reed, a business man with 25 years' experience in India, in a memorandum submitted to the Royal Commission, "that the existing methods have not gained the public confidence in their [*i.e.* the Government's] ability and willingness to combat a crisis." [2] Such also is the testimony of many others.[3] The Royal Commission unfortunately was not willing to recommend making the redemption of rupees on demand in gold exchange a statutory requirement. It said: "We have considered whether it would be desirable to make the Gold Standard Reserve the subject of statutory regulations. But there are disadvantages in restricting the freedom of Government in a crisis, and it is undesirable that the disposition and amount of the Reserve should be stereotyped until further experience makes it possible to forecast with greater certainty the nature and the extent of the calls which may be made upon it. We therefore do not recommend that the Gold Standard Reserve should

[1] Cf. supra, pp. 116–118 and 120–121.
[2] Rep. Roy. Com. Ind. Fin. & Cur., App. XXII, p. 573.
[3] Cf. Doraiswami, op. cit., pp. 37–38; also testimony of Stanley Reed, Editor of the Times of India, in Rep. Roy. Com. Ind. Fin. & Cur., Evidence, Q. 9970.

be regulated by statute."[1] It seems strange that a great country like India, with gold and invested sterling reserves of over £40 millions, with excellent borrowing credit, with the support of England, and after an experience with the gold standard of fifteen years, is so afraid to assume the responsibility of a statutory commitment to redeem its fiduciary coins in gold on demand. Certainly the Indian business community is justified in wanting the Government to assume this responsibility.

The Royal Commission, however, did go so far as to say that the crisis of 1907–08 had taught the Government the desirability of formulating in advance and giving publicity to the policy which it intended to pursue in a crisis. The Commission further declared that the cardinal feature of the whole system was "absolute security for the convertibility into sterling of so much of the internal currency as may at any moment be required for the settlement of India's external obligations";[2] it also said that "it is almost as important that the general public should have confidence in the determination of the Government effectively to use their resources to maintain the rupee at 1*s.* 4*d.*, as it is that the Government should have the necessary resources for so doing."[3] The Commission went so far as to advise that the Government should make a public notification of their intention to sell bills in India on London at the rate of 16*d.*, whenever they were asked to do so, "*to the full extent of their resources.*"[4]

The Paper Currency and the Paper Currency Reserve since the Crisis of 1907–08

Since the crisis of 1907–08, there has been a large increase in the paper currency circulation, that circulation rising

[1] Rep. Roy. Com. Ind. Fin. & Cur., sec. 101.
[2] Ibid., sec. 76.
[3] Ibid., sec. 52.
[4] Ibid., sec. 101. Italics are mine.

from R. 469 millions on March 31, 1908 to R. 690 millions on March 31, 1913. Paper money has been growing rapidly in popularity in India. Probably the chief single factor in this increasing popularity has been the "universalization" of the notes of denominations of R. 100 and under,[1] so that these notes are now a legal tender throughout British India and are encashable at treasury offices in different parts of the country. The larger denominations are still limited to their respective "circles."[2] In order further to popularize the notes, the Royal Commission recommended that notes of the denomination of R. 500 should at once be universalized.[3] At the end of the fiscal year 1902–03, before any of the notes were universalized, the percentage of the gross note circulation represented by notes of denominations of R. 100 and less was 49, while at the end of the fiscal year 1911–12, after all notes in denominations not exceeding R. 100 (except the R. 20 note which was being withdrawn) had been universalized, the percentage of the gross circulation represented by notes of R. 100 or less had increased to 57.[4]

The fiduciary part of the Paper Currency Reserve, we have seen,[5] was increased from R. 100 millions to R. 120 millions in 1905–06, the additional R. 20 millions being invested in British securities and held in England. In 1913 authority was given for a further increase of R. 20

[1] As previously noted, in 1905 the 5-rupee note issued from any town not in Burma was made legal tender throughout British India, except in Burma, and encashable at any office of issue not in Burma. In 1909 the exception of Burma was removed and the 5-rupee note was made "universal." Under authority of Act II, 1910, the notes of 10, 50, and 100 rupees have since been universalized, and the issuance of the 20-rupee note has been discontinued. Cf. Rep. Roy. Com. Ind. Fin. & Cur., App. VIII, p. 240.

[2] Cf. supra, pp. 8–9.

[3] Rep. Roy. Com. Ind. Fin. & Cur., sec. 115.

[4] Computations based on figures given in Rep. Roy. Com. Ind. Fin. & Cur., App. VIII, pp. 240 and 248–249.

[5] Cf. supra, p. 100.

millions in the fiduciary portion of the Reserve, authority likewise being given and utilized to invest these R. 20 millions in sterling securities and keep them in England. After the crisis of 1907–08 the percentage of gold in the Reserve continually increased until in 1913 it amounted in round numbers to 56 per cent of the total Reserve, 24 per cent being silver and 20 per cent being securities. Approximately one fourth of the gold was held in England at the end of the year 1912–13 and three fourths (about £20 millions) in India. Despite the efforts of the Government through the sale of council drafts in London to prevent the undue accumulation of gold in the Paper Currency Reserve in India, the amount there accumulated increased out of all proportion to needs, and, inasmuch as the gold when needed is usually needed mostly in London either for the purchase of silver or securities or for the redemption of drafts, it had to be transferred to London often at the Government's expense. The Royal Commission made the recommendation previously mentioned[1] that the R. 60 millions in the Gold Standard Reserve in India should be transferred to the Paper Currency Reserve in exchange for £4 millions in sovereigns to be transferred from the Paper Currency Reserve to the Gold Standard Reserve in London. The Commission further recommended that the fiduciary portion of the Paper Currency Reserve should be increased at once from R. 140 millions to R. 200 millions, but that, instead of fixing this figure as a maximum, the maximum of the fiduciary portion should be fixed at the amount of the notes held by the Government in the reserve treasuries, and therefore not likely to be presented for redemption, plus one third of the net circulation for the time being.[2] The Commission also recommended (1) that this readjustment should be accomplished by the transfer of sterling securities to the amount of £4 millions from the Gold

[1] Supra, p. 132.
[2] Rep. Roy. Com. Ind. Fin. & Cur., sec. 112.

Standard Reserve to the Paper Currency Reserve in exchange for the equivalent in gold coin, thereby further increasing the proportion of gold in the former Reserve and decreasing it in the latter; and (2) in order to maintain the proper proportions, the Commission recommended that the Government "should have power not only to make such further permanent investments as they think fit but also to make temporary investments or to grant loans either in India [to the Presidency Banks] or in London." [1] Among other advantages claimed for this plan were that it would keep the Reserve profitably invested and would provide additional funds for the Indian money market in the busy season.

Gold Circulation and Proposals for Coining Gold in India

The third and last topic to be considered for the period from the crisis of 1907–08 to the outbreak of the European War is that of the circulation of gold coin in India and the coinage of gold at the Indian mints.

It has previously been noted that the Fowler Committee contemplated an increasing use of gold coin in India's circulation. To that end the sovereign was made unlimited legal tender, and steps were taken for coining gold in India. The Government early began paying out gold from post offices and other government offices, and in other ways endeavored to encourage its circulation.[2] These efforts, however, were not very successful. In some sections of India there was a moderate circulation of gold (*e.g.*, parts of Bombay and the Punjab), but throughout the greater part of the country the circulation was almost negligible. Most of India's heavy imports of gold from Australia and South Africa appear to have found their way either into the reserves or into ornaments and hoards. Reports have been common in recent years of an increas-

[1] Rep. Roy. Com. Ind. Fin. & Cur., sec. 113. [2] Cf. supra, p. 93.

ing tendency to hoard gold in place of silver. The blow to confidence in the rupee currency given by the crisis of 1907-08 strengthened this tendency.

After that crisis there was much agitation in favor of increasing the gold circulation of India, such a policy being strongly favored by the Indian people and by many high government officials. Space will permit only a brief consideration of the chief points in the controversy.

Arguments in Favor of a Large Circulation of Gold in India. The strongest arguments advanced in favor of a large circulation of gold coin in India are:

(1) That there are important monetary needs in India for which gold coin alone is suitable. Checks are little used. The masses of the people distrust the banks — often with reason, for there have been in recent years a number of bank failures which have brought disaster to the poorer classes.[1] Paper money cannot be hoarded without risk of rotting or of being destroyed by rats and insects. Rupees are too bulky for large hoards or for large transfers.[2]

(2) It is argued that the Indian people lack confidence in the stability of the rupee, as shown by the increasing tendency to hoard gold, and that a substantial

[1] Cf. East India Fin. Stat. and Budget, 1914–15, pp. 29–30.

[2] The following passage is from the testimony of Stanley Reed, Editor of the Times of India, before the Royal Commission on Indian Finance and Currency (Q. 9993): "If you follow the course of money from the bank to the ryot's house, you must see how absolutely essential it is for him, both now and for a generation hence, to be largely dependent upon a metallic currency. If a man took notes from a cotton centre . . . and went to his village 25 or 30 miles away, they would be waste paper for him to a large extent. He would have nowhere to put them. If you go into a ryot's house you will see that he has got no strong box. If he has a chest of any sort, it is so flimsy that it is an invitation to the robber. If he puts his notes in his roof they are quite likely to be eaten by rats, because in an Indian household the rat lives in large numbers in intimate relation with the family. If he buries them in the ground, they might be destroyed by the monsoon or eaten by white ants or anything else. For that reason he must have metallic currency of some sort or other, because in nine cases out of ten he buries it in the ground."

circulation of gold is requisite to inspire confidence in the currency.[1]

(3) A third reason is the fear that if redemption in drafts on London is the chief dependence for the maintenance of the parity of the rupee, the gold reserves maintained in London will be exploited for the benefit of the London money market, or at best for that of the British Government, in time of emergency, to the neglect of India's prior needs. With the gold reserves in India, it is claimed that the gold would be more effectively under the control of Indian interests.

(4) There is a strong public sentiment in India for gold in circulation, and, whether grounded upon adequate reasons or not, it exists, and if the people want gold and are willing to pay for it they should have it. Sir Guy D. A. Fleetwood Wilson, Finance Member of the Indian Council from 1908 to 1913, testified that while in India he had tried to get into touch with Indian opinion and that the impression he received was "that there is an almost national desire to have an Indian gold coin. They are very tenacious and very touchy about the differentiation between India and the colonies, and I think that is a little grievance in India, and if you can remove this sentimental grievance, it will be a very advantageous thing to do so." [2]

This sentiment in favor of gold, it is claimed, is shown by an increasing popularity of the sovereign since 1909 in the circulation of certain provinces and districts, such as parts of Bombay Presidency, and of the United Provinces, the Punjab, and Cochin in the Madras Presidency.[3] The Financial Member of the Viceroy's Council in his budget speech of 1913–14 said: "Out of the total additions to

[1] Cf. J. Shields Nicholson in Economic Journal, XXIV, 1914, pp. 238–239; also note by Sir James Begbie, in Rep. Roy. Com. Ind. Fin. & Cur., p. 88, sec. 5.

[2] Rep. Roy. Com. Ind. Fin. & Cur., Evidence, Q. 11,425.

[3] Ibid., sec. 54.

the currency in the three years ending March 1912 amounting to 65 crores, rupees accounted for only 28 crores. The habits of the people in fact are changing. The last currency report of the Comptroller General shows clearly that gold has to an increasing extent established itself in ordinary circulation. . . ."[1]

Arguments against a Large Circulation of Gold in India. The reasons for not encouraging the circulation of gold in India were forcibly stated by Professor J. M. Keynes in his excellent book on *Indian Currency and Finance,* published in 1913, of which chapter 4 deals with The Present Position of Gold in India and Proposals for a Gold Currency. The position there taken by Keynes was later followed in its essentials by the Royal Commission on Indian Finance and Currency, of which he became a member. The chief reasons for not encouraging the circulation of gold in India are:

(1) That the proper place for gold if it is to be available for emergencies is in government reserves or bank reserves, not in the pockets of the people. In time of crisis gold is chiefly needed for exportation and it is needed promptly and in large quantities. To meet such a need it cannot be collected from the public — in fact, in time of crisis the people are likely to hold it with a firmer grip than usual.

(2) Not only would gold in circulation be of little avail for meeting emergency demands, but it would be an actual obstacle to the making of adequate preparations for meeting such demands, and might even increase the burden placed upon the country's reserves. Experience shows that in those districts of India where gold in circulation is most popular the Government's currency notes are least popular; in fact there is evidence that, in some districts at least, the popularity of the notes declines as that of gold coins increases. It is very natural that the sovereign, being

[1] East India Fin. Stat., 1913–14, p. 17.

a coin of a moderately large denomination for India, should take the place of the notes. But for the public to present notes to the redemption offices and take gold coins for circulation from the Paper Currency Reserve is to weaken the Reserve, since only part of the Reserve would be kept in gold, a large part being kept in the form of interest-bearing securities. Securities would need to be sold to restore the proper proportion of gold and the income of the Reserve would be curtailed.

To a lesser degree the gold coins would take the place of silver rupees. This would lessen the seigniorage profits available for building up the Gold Standard Reserve, but since "it is the fiduciary coins with which the public are most eager to part" in time of emergency, "the infusion of more gold into the circulation would . . . not correspondingly reduce the amount of . . . reserves which Government ought in prudence to keep."[1]

(3) Gold is too expensive a material to be used as a circulating medium in a comparatively poor country like India, which effects its exchanges so largely by means of money instead of by checks and other money substitutes. For India a large amount of gold in circulation would be an expensive luxury. The country, moreover, already wastes large resources in the needless hoarding of the precious metals, and the Government ought not to encourage in the slightest degree this ingrained fondness for handling gold. On the other hand, the Government should do everything reasonable to encourage the use of notes, checks, and other inexpensive exchange media.

(4) India is a country in which the demand for currency is highly seasonal, and India like the United States demands a high degree of currency elasticity. It is through the development of the use of notes (particularly bank-notes), and checks, not of gold coin, that adequate seasonal elasticity can best be secured.[2]

[1] Keynes, p. 91.

[2] Ibid., pp. 96–97.

Coinage of Gold in India. A part of the controversy over the use of gold coin in India related to the coinage of gold at the Indian mints. It has previously been noted that steps were taken in 1900 and 1901 in the direction of providing for the coinage of gold in India.[1] The movement thus begun was brought to a halt apparently because of the opposition of the Home Government; and, despite a strongly favorable sentiment in India, repeated efforts by the Indian Government, and a voluminous correspondence between that Government and the British Treasury,[2] no branch of the Royal Mint has yet been established in India for the coinage of gold, nor have the Indian mints been authorized to coin gold. Apparently the British Treasury early made up its mind that the coinage of gold in India was undesirable, and undertook to wear out the patience of the Indian Government by raising all sorts of petty objections.

While the argument in favor of coining gold in India depends for its validity largely upon a favorable judgment as to the desirability of encouraging the wide circulation of gold coins in India, not all who favor the wide circulation of gold favor also the coinage of gold at the Indian mints. Some, believing that the sovereign is the gold coin best adapted for India's use, think that this coin for circulation in India can most cheaply and effectively be coined at the existing mints in India and perhaps also in Australia. In the discussions of this subject much has been made of the fact that India is herself a producer of considerable quantities of gold,[3] and that it involves a needless expense to be compelled to ship this gold to London to have it coined, and then to bring it back to India. Another argument of

[1] Supra, pp. 109–111.

[2] Cf. correspondence on subject. East India (Mint for Gold Coinage), Cd. 6619, No. 495 of 1913.

[3] The annual gold production of British India and the Native States varied between 1904 and 1913 from a minimum of £2,135,000 (1907) to a maximum of £2,418,000 (1905). Stat. Abs. rel. Brit. India, 48th number (1915), pp. 266–267.

weight is the desirability of catering to Indian public sentiment, which is highly favorable to India's having her own mint for the coinage of gold.[1]

Those favoring the coinage of gold in India are not unanimous as regards the coin that should be minted. Some favor a sovereign identical with the British sovereign that could be shipped back and forth and would circulate both in India and Great Britain. Such a sovereign has been dubbed "the cement of the Empire."[2] This proposal raises some problems of control. The Royal Mint would naturally wish to control rather rigidly the minting of such a coin, while India is proud of the excellent work done by her mints and does not want English interference. Over the control of their mints the Indian people are very jealous.[3]

Another proposal is to coin a sovereign analogous to that of Australia.[4] It would be identical with the British sovereign, except that it would have the word "India" stamped upon it. Such a coin would not circulate freely outside of India, but unless carefully controlled might cause difficulty if it worked its way into the home circulation.

The third plan was for a gold 10-rupee piece which would be a distinctive Indian coin. It would be a new coin, however, not exportable except as bullion, and would tend to divorce still further the Indian currency system from that of the home country.

The Royal Commission in its final Report, after concluding that "it would not be to India's advantage to encourage an increased use of gold in the internal circulation,"[5] took the position that the minting of gold coin in India was undesirable. It did not believe that the minting of gold in

[1] Cf. East India Fin. Stat., 1913–14, p. 17.
[2] Rep. Roy. Com. Ind. Fin. & Cur., Evidence, Q. 11,425.
[3] Ibid., Qs. 11,426–11,430.
[4] The Australian sovereign has "Australia" stamped across it.
[5] Rep. Roy. Com. Ind. Fin. & Cur., sec. 68.

India was needed to strengthen confidence in the Indian Currency system, because it declared that the growth of a strong Gold Standard Reserve and the whole trend of policy since the crisis of 1907–08 left no doubt as to the determination of the Government to maintain exchange. The Commission said that

"the mere existence of a mint for the coinage of gold could not add to the amount of gold available for currency purposes, and the idea that such a unit would give an 'automatic' currency, in any sense which is not true of the existing power to import sovereigns at will, appears to us to be wholly without foundation." [1]

Nor did the Commission believe it likely that "the facilities for converting gold bullion into coin which such a mint would provide would have any appreciable effect on the amount of gold withdrawn from circulation or would encourage gold to come out of hoards in unfavorable seasons." [2] In any event, it maintained, the public would secure equal advantages if the Government of India would renew the Notification, withdrawn in 1906, of its readiness to accept gold at the Bombay Mint in exchange for notes or rupees.[3] None the less the Commission said there was "no objection in principle either from the Indian or the Imperial standpoint" to the minting in India of sovereigns and half-sovereigns "if Indian sentiment genuinely demands it, and the Government of India are prepared to incur the expense. . . . It is preëminently a question in which Indian sentiment should prevail." [4] To the present writer, however, it would seem that the coinage of gold in India would tend to encourage its circulation there, and that this would be an objection in principle to the position taken by the Royal Commission against the encouragement of such circulation.

[1] Ibid., sec. 71.
[2] Ibid., sec. 72.
[3] Ibid., sec. 72.
[4] Ibid., sec. 73.

Indian Currency since the Outbreak of the European War

The final Report of the Royal Commission was not rendered until February 24, 1914. Scarcely had it been published and circulated when the European War broke out, and currency reform in India was compelled to give way to more urgent matters.

It is too early to speak with adequate information on the functioning of the Indian currency system under the stress of the Great War. A few facts, however, stand out prominently during the first twenty months.

On July 31, 1914, when war became a practical certainty, exchange in Calcutta and Bombay fell suddenly to the gold-export point, *i.e.*, $15\frac{27}{32}d$. Business in India received a bewildering shock, and the need of prompt measures by the Government became manifest. The Government acted quickly by issuing a Notification on August 3 along the line of the one issued early in the crisis of 1907–08.[1] It announced that, with the approval of the Secretary of State for India, it would support exchange by all the means in its power. As in the previous crisis, although in this case with more justification, the Government lacked the courage to offer to sell on demand sterling drafts on London at the gold-export rate in unlimited quantities. None the less, it offered to sell such bills or cable transfers weekly until further notice to a maximum limit of £1,000,000, at the rate of $15\frac{29}{32}d$. for demand bills and $15\frac{13}{32}$ for telegraphic transfers.[2] Its chief resort for the maintenance of exchange was wisely the sale of drafts on London, not redemption of rupees in gold in India. The Government in fact took measures to prevent the wasteful absorption into hoards and Indian circulation of the large supplies of gold — at that time £12,900,000 — held in Indian government vaults. During the forepart of August 1914 the Govern-

[1] Cf. supra, pp. 117–118.
[2] Cf. [London] Economist, 1914, p. 912; and Statist, 1914, p. 383.

ment's weekly offers of £1,000,000 in sterling bills (or telegraphic transfers) did not meet the total bids at the official rates, but this situation soon passed, and since August 1914 the Government's offer of £1,000,000 a week has been much more than sufficient to meet all demands at the official rates.[1]

India's trade has naturally suffered greatly from the War, and this has been somewhat more true of her import trade than of her export trade.[2] Certain of her exports have been in heavy demand for War needs, and as a result exchange soon recovered, and, at this writing (March 4, 1916), rates in Calcutta and Bombay on London are well above par. The London *Economist* said in its issue of October 17, 1914, "The Indian finance and currency system stood the strain of the August days of crisis better than that of any other country. . . ."[3] That statement may be too strong, but it is certainly true that since the outbreak of the War few if any currency systems have more effectively met the shock of world catastrophe.

[1] As early as September 1914 the bids for the month had fallen to £1,515,000, while the Government's offers were £4,000,000. Statist (Dec. 26, 1914), p. 645.

[2] Cf. Decline in India's Foreign Trade, in Commercial and Financial Chronicle, 103 (July 15, 1916), pp. 209–210.

[3] P. 641.

APPENDIX A

A Selected Bibliography

ANDREW, A. PIATT. Indian Currency Problems of the Last Century. Quarterly Journal of Economics, XV, 1901, pp. 483–516.

Anonymous. India's Present Monetary Condition. Economic Journal, XVII, 1907, pp. 47–56.

——. The Monetary Condition of India. Economic Journal, X, 1900, pp. 455–66.

ATKINSON, FRED J. Silver Prices in India. Journal of the Royal Statistical Society, LX, 1897, pp. 84–147.

——. Rupee Prices in India, 1898–1901. Journal of the Royal Statistical Society, LXVI, 1903, pp. 103–118.

——. Rupee Prices in India, 1870 to 1908; with an Examination of the Causes Leading to the Present High Level of Prices. Journal of the Royal Statistical Society, LXXII, 1909, pp. 496–573.

BARBOUR, SIR DAVID. The Standard of Value. London: Macmillan & Co., 1912.

Board of Trade. Report on Wholesale and Retail Prices in the United Kingdom, 1902, with Comparative Statistical Tables for a Series of Years. London: Eyre & Spottiswoode, 1903. British Blue Book.

BOTHE, M. Die indische Währungsreform seit 1893. Stuttgart & Berlin: J. G. Cotta'sche Buchhandlung Nachfolger, 1904.

CHALMERS, ROBERT. A History of Currency in the British Colonies. London: Eyre & Spottiswoode, 1893.

CONANT, CHARLES A. The Gold Exchange Standard in the Light of Experience. Economic Journal, XIX, 1909, pp. 190–200.

Correspondence respecting the Proposals on Currency Made by the Government of India. London: Eyre & Spottiswoode, 1898. British Blue Book, Cd. 8840.

Deputy Master of the Mint. Annual Reports. British Blue Books.

Director of the Mint. Annual Reports. Washington.

DODWELL, H. A. Gold Currency for India. Economic Journal, XXI, 1911, pp. 387–392.

Doraiswami, S. V. Indian Finance, Currency and Banking. Mylapore, Madras: Author, 1914.

East India. Financial Statements. Annual, 1890–1915. London: Eyre & Spottiswoode. British Blue Books.

——. Statement Exhibiting the Moral and Material Progress and Condition of India during the Year. Annual, 1890–1915. London: Eyre & Spottiswoode. British Blue Books.

Ellstaetter, Karl. The Indian Silver Currency. An Historical and Economic Study. Translated by J. Laurence Laughlin. Chicago: University of Chicago Press, 1895.

Fowler Committee. Indian Currency Committee of 1898. Report of the Committee Appointed to Inquire into the Indian Currency; with Minutes of Evidence and Appendices. London: Eyre & Spottiswoode, 1899. British Blue Book.

Giffin, Sir Robert. The Indian Gold Standard Problem. Economic Journal, VIII, 1898, pp. 301–313.

Goodrich, H. St. A. Land Revenue in Madras. Economic Journal, I, 1891, pp. 449–459.

Harrison, F. C. An Attempt to Estimate the Circulation of the Rupee. Economic Journal, I, 1891, pp. 721–751; II, 1892, pp. 256–279.

——. Silver in India. Economic Journal, II, 1892, pp. 653–661.

——. The Past Action of the Indian Government with Regard to Gold. Economic Journal, III, 1893, pp. 52–61.

——. The Indian Currency Question. Economic Journal, IV, 1894, pp. 262–269.

Herschell Committee. Indian Currency Committee of 1892–1893. Report of the Committee Appointed to Inquire into the Indian Currency; with Minutes of Evidence and Appendices. London: Eyre & Spottiswoode, 1893. British Blue Book.

This Report was reprinted as a United States Public Document. Senate Miscellaneous Documents, 53d Congress, 1st Session, Volume II.

Heyn, Otto. Die indische Währungsreform. Berlin: J. Guttentag, 1903.

Horton, Dana. The Suspended Rupee and the Policy of Contraction. Economic Journal, III, 1893, pp. 475–482.

International Monetary Conference Held at Brussels in 1892. Report of the Commissioners on Behalf of the United States, and Journal of the Sessions of November 22, 1892, to December 17, 1892. Washington: Government Printing Office, 1893.

Keynes, J. M. Indian Currency and Finance. London: Macmillan & Co., 1913.

KEMMERER, E. W. The Recent Rise in the Price of Silver and Some of Its Monetary Consequences. Quarterly Journal of Economics, XXVI, 1912, pp. 215–274.

——. Money and Credit Instruments in their Relation to General Prices. Second Edition. New York: Henry Holt & Co., 1909.

LINDSAY, A. M. Ricardo's Exchange Remedy. London: Effingham Wilson & Co., 1892.

——. How to Fix Sterling Exchange. A Well-tried, Safe and Economical Method. Calcutta: Thacker, Spink & Co.; London: W. Thacker & Co., 1898.

MACLEOD, H. D. Indian Currency. London: Longmans, Green & Co., 1898.

MOLESWORTH, GUILFORD. Indian Currency. Annals of the American Academy of Political and Social Science, IV, 1893–94, pp. 493–528.

NICHOLSON, J. S. The Effects of the Depreciation of Silver with Special Reference to the Indian Currency Experiment. Economic Journal, IV, 1894, pp. 59–69.

——. The Report on Indian Finance and Currency in Relation to the Gold Exchange Standard. Economic Journal, XXIV, 1914, pp. 236–247.

PASLAIN, JACQUES. Les Changes Étrangers et Les Prix. Paris: Guillaumin et Cie., 1905.

PROBYN, L. C. Indian Coinage and Currency. London: Effingham Wilson & Co., 1897.

ROBERTSON, J. BARR. The Currency Policy of India. Journal of the Society of Arts, March 27, 1903.

Royal Commission Appointed to Inquire into the Recent Changes in the Relative Values of the Precious Metals. Final Report: with Minutes of Evidence and Appendices. London: Eyre & Spottiswoode, 1888. British Blue Book.

Royal Commission on Indian Finance and Currency. Final and Interim Reports: with Minutes of Evidence and Appendices. London: Eyre & Spottiswoode, 1913. British Blue Books.

RUSSELL, HENRY B. International Monetary Conferences. New York: Harper & Brothers, 1898.

SARMA, S. K. Indian Monetary Problems. Madras: Law Printing House, 1911.

Silver Commission of 1876. Report. Reprinted from Senate Report No. 703, 44th Congress, 2d Session. Washington: Government Printing Office, 1887.

SINGER, KURT. Die Motive der indischen Geldreform. Strassburg: J. Trübner, 1910.

SMITH, J. T., and Others. Indian Currency. Collected Essays. London: Effingham and Wilson.

SPALDING, W. F. Foreign Exchange and Foreign Bills in Theory and in Practice. London: Sir Isaac Pitman & Sons, 1915.

Statistical Abstracts relating to British India. Annual, 1890–1915. British Blue Books.

United States Monetary Commission, "The Silver Commission." Report and Accompanying Documents, 1876. Washington: Government Printing Office, 1877.

WEBB, M. DE P. A Memorandum on the Indian Currency. Gold for India. Karachi, India: The Mercantile Steam Press, 1911.

PART II

THE PORTO RICAN CURRENCY REFORM OF 1899–1900

CHAPTER I

Currency History of Porto Rico Prior to the American Occupation

The Porto Rican currency reform of 1899–1900 differs from most other currency reforms in the simplicity of its plan and in the shortness of the period in which it was carried through. The plan of reform adopted was the one which would most naturally suggest itself to the superficial observer, and the work of effecting the transition from the old currency to the new was almost entirely accomplished within a period of three months. This reform involved a great increase in the unit of value and affords the student of monetary science valuable lessons as to the economic results of large and rapid increases in the monetary unit.

In order to facilitate an understanding of the monetary problems that confronted the American Government at the time of the American occupation and of the attitude of the Porto Rican people to the different reform plans suggested, it will be advisable to summarize briefly the recent monetary history of the Island under the Spanish régime.

Monetary History of Porto Rico from 1879 to the Reform of 1895

A convenient starting place for this study is the year 1879, the year in which the Mexican peso became legally current in the Island. For some time prior to that year[1]

[1] The reader interested in the extremely varied monetary history of Porto Rico will find it summarized in a series of newspaper letters written for El Aguila de Puerto Rico, of Ponce, Porto Rico, in the spring of 1910 by

the principal coins of Porto Rico had been Spanish and American silver and gold coins, although there were in circulation also English sovereigns, French napoleons, and certain other foreign coins, notably from South America.[1] These different coins were legally current at certain established rates, the nominal unit of value being the Spanish five-peseta piece, peso or *duro*—a coin of 25 grams .900 fine, or of approximately 93.5 per cent of the silver content of an American silver dollar.

In the year 1873 slavery was by Spanish law abolished in the Island, and bonds were issued for the purpose of providing funds with which to compensate the slave owners. A French syndicate in 1879 bought the slave bonds and was granted the privilege of making payment in imported Mexican pesos. These Mexican pesos were given legal currency by a royal order of February 22, 1879. They were overvalued in circulation as compared with the other coins, and, since they could be freely imported and silver was at the time depreciating in terms of gold, they gradually drove out of circulation the Spanish and American gold and most of the other silver coins, including the Spanish peso, thus becoming the dominant currency of the Island. Although the Spanish peso continued to be the nominal unit, and the Mexican peso was legally rated as only 95 per cent of a Spanish peso, for all practical purposes the Mexican peso was the monetary unit of the country.[2]

Rafael López Landrón, and republished in book form in 1911 under the title Cartas Abiertas para el Pueblo de Puerto Rico (pp. 64-98). The letters exhibit a rather crude monetary philosophy on the part of the author, but the statements of fact, regardless of their interpretation, appear to be fairly reliable.

A good brief historical account of the Porto Rican currency is contained in a memorandum prepared in 1899 by the Civil Secretary of Porto Rico, Cayetano Coll y Toste, Jr. See Davis, Annual Report, 1899, pp. 708-709.

[1] A list of the gold and silver coins most current in Porto Rico in 1878, with their respective bullion contents and money values, will be found in Manuel Ubeda y Delgado, Isla de Puerto Rico, Estudio Historico, Geographico y Estadistico de la Mesura, pp. 90-91.

[2] Cf. Landrón, pp. 69, 72-76; Robert P. Porter, Report on the Currency

As the price of silver continued to decline there was a consequent increase in the importation of Mexican pesos and a rise in foreign exchange.[1] The latter part of 1886, the Spanish Government, with a view to maintaining values in Porto Rico, issued a decree prohibiting the further importation of Mexican pesos. Henceforth only such Mexican pesos as bore the date of 1886 or of earlier years were legally current. This limited the supply of money, divorced the value of the monetary unit from that of silver, and transferred Porto Rico from a silver standard to a fiduciary standard similar to that prevailing in the Philippines from 1877 to 1898.[2]

The following chart will show in a rough way the relation of the exchange value and the bullion value of the Mexican peso for the years 1890 to 1895, reliable data for earlier years not being available.[3] For the convenience of the American reader exchange rates have been converted to the value of the Mexican peso in terms of United States money. A glance at the chart will show that after the beginning of 1891 the value of the peso as measured by New York exchange continually ruled substantially above its bullion value. From March 1891 to December 1895 the differentials between the dominant New York exchange rate and the maximum monthly bullion value of the peso varied from 3 per cent, in July 1891, to nearly 40 per cent, in March 1894. The differential was largest during the year and a half following the great drop in silver consequent

Question of Porto Rico to the Secretary of the Treasury, January 3, 1899, pp. 8–9.

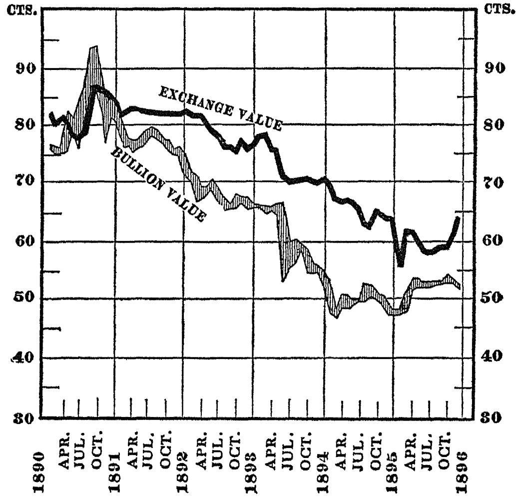
[1] Rates in Porto Rico on New York are quoted in terms of the number of Porto Rican pesos required to buy $100 in New York, *e.g.* 150 or 170. Often these rates are spoken of in terms of percentage premium, as for example 50 per cent or 70 per cent. Spanish exchange was quoted like New York exchange. Sterling exchange was quoted in terms of the number of pesos to the pound sterling, *e.g.* 7.70, 7.80, etc.

[2] Cf. infra, pp. 235–36.

[3] A table giving the figures on which this chart is based will be found in Appendix A, pp. 247–53.

on the closing of the Indian mints (June 1893) and the repeal of the Sherman Silver Purchase Act (November 1,

VARIATIONS IN VALUES OF MEXICAN PESO, 1890-1895



1893), *i.e.*, July 1893 to December 1895. During this period the exchange value of the peso tardily followed the bullion value in the direction of a lower level. For the period the oscillations of the exchanges were the reflections chiefly of the demand and supply of merchandise bills, and had little relation to the price of silver, except in so far as declines in silver made the smuggling of Mexican pesos into Porto Rico more profitable, and thereby tended to increase this illicit traffic. The situation in this regard was very similar to that existing in the Philippines in the latter days of the Spanish régime.[1] The law denied legal currency to Mexican pesos bearing later dates than 1886, but coins of earlier dates were smuggled into the Island, and also those of later dates, the dates having first been altered. This was often

[1] Infra, p. 248, note.

done, it is reported, with the connivance of Spanish government officials, and a more or less regular contraband trade in Mexican pesos was conducted.

The evils of a fluctuating exchange,[1] with a declining gold value of the peso, the well-known smuggling abuses, and the general dissatisfaction arising from the fact that the country's currency consisted chiefly of foreign coins possessing the unlimited coinage privilege in another country, and therefore largely beyond the control of the Colony or its sovereign State, gave rise to frequent complaints in Porto Rico, and to petitions for currency reform. The hope and expectation in the Colony appears to have been that the Island's monetary system would be assimilated to that of the mother country.[2]

The Currency Reform of 1895

In 1895 the Spanish Colonial Minister (*Ministro de Ultramar*) took the subject under advisement, and considered three different proposals: (1) the introduction of a gold standard with gold coins in circulation; (2) the introduction of the Spanish monetary system with Spanish silver coins; and (3) the creation of a distinctive Porto Rican coinage, the unit to be a peso of the same weight and fineness as the Spanish five-peseta piece, but to bear a distinctive Porto Rican stamp. It is not necessary to enter into the details of the arguments advanced for and

[1] "In February, 1895, exchange rose suddenly and fully 30 per cent within a few days, owing to the smuggling of P 600,000 Mexican silver; [the symbol "P" will be used throughout this paper to signify pesos in contrast to "$" signifying U.S. dollars] but it dropped down almost as fast when the momentary requirement of drafts was covered." Henry K. Carroll, Special Commissioner of the United States to Porto Rico: Report on the Island of Porto Rico, etc., p. 478.

[2] As early as 1864 a law was actually published fixing as the monetary unit the Spanish escudo, and providing other coins of gold, silver, and copper for the provinces of Ultramar, including Porto Rico; but the law was never put into operation in the Island. Cf. Landrón, pp. 70–71.

against these plans.[1] Suffice it to say that the plan of a gold standard with gold coins, while looked upon as an ultimate ideal, was thought to be out of the question at that time because: (a) it would be altogether too expensive, and it was unreasonable to expect Spain to place her colony upon a strict gold standard when she could not afford such a monetary luxury for herself; and (b) gold if introduced into circulation would immediately disappear, thus denuding the Island of its currency.

The objection to the proposal to assimilate the currency of Porto Rico to that of Spain was even less convincing. It was chiefly that if Spanish money were substituted for Mexican pesos, the Spanish money would be drawn out of the Island and exported to Spain in settlement directly of trade balances due Spain, and, through Spain, indirectly, of balances due other countries. This would cause a rarefication of the Porto Rican currency and would result in serious financial disturbances and disaster.[2] The fallacy of this naïve reasoning is obvious. Clearly the very rarefication, which the Minister feared, would have so tightened the Porto Rican money market as to protect the insular currency supply against depletion, and even to draw more money from Spain when it was urgently needed in the Island. A country like Porto Rico, moreover, having only about 6,000,000 pesos of metallic money in circulation, could not have pumped a disturbing amount of money into the Spanish circulation at home; nor could it have

[1] For a detailed discussion of this subject see: Canje de la Moneda en Puerto Rico. Discursos pronunciados por el Excmo. Sr. D. Tomás Castellano, Ministro de Ultramar, en las sesiones del Congreso de las dias 6 y 8 Agosto de 1896 y en la del Sendao del 11 del mismo mes y año, pp. 20–22.

[2] Later, as a proof that this would have taken place, the fact (p. 164) was cited that the Spanish copper coins, of which 70,000 pesos had been introduced in 1895, and which as fractions of the Mexican peso were undervalued as compared with their values as fractional coins in Spain, had tended to flow back to Spain and would all have flowed back had they not had holes bored in them to prevent their exportation.

received an undue amount from Spain in any year without its promptly "overflowing the channels of circulation" and finding its way back to the home land.

A Distinctive Porto Rican Coinage Introduced. This objection, however, appeared conclusive to the Spanish authorities, and as a result the third plan, namely that of a distinctive Porto Rican coinage, was adopted. The action was taken in Spain without discussion in Porto Rico, and the money was coined and arrangements made for putting it into circulation before the fact became known to the Porto Ricans [1] (except in so far as there had been official "leaks"). The plan was inaugurated with secrecy and dispatch in order to prevent the further smuggling into Porto Rico of Mexican currency, which otherwise would have occurred with the object of taking advantage of the "favorable rate" at which the *canje* (exchange) was to be effected.

The three cardinal features of the plan, as contemplated by the Spanish authorities, were described by the Colonial Minister. They were: [2] (1) Both silver and gold should be legally current in Porto Rico, and preference should be given to gold, which should be legally rated at a premium over silver approximately equal to the commercial premium prevailing in Spain, *i.e.*, about $13\frac{1}{2}$ per cent. "This rating," said the Minister, "is recommended, not because I would pretend to subject the foreign exchanges to such a premium, but rather to give greater facility and encouragement to the introduction of gold coins into the circulation of the Island, in the future when the economic conditions have improved." (2) The unit of value was to be a peso of the same qualities as the Spanish duro, with the same fineness and the same design, the chief modification being that the legend "Isla de Puerto Rico" was placed on the front side to indicate that its circulation would be limited to Porto Rico. This coin contained approximately

[1] Castellano, p. 41.

[2] Ibid., p. 25.

8 per cent less fine silver than the Mexican peso.[1] (3) To afford encouragement to those whose hopes could not at the moment be realized, "but the realization of which it was none the less possible to contemplate for the future, namely, to those who hoped that a time might arrive when the silver money of Porto Rico would circulate in Spain, and likewise that of Spain in Porto Rico," there were to be inscribed at the bottom of the new pesos the words "Un peso, igual 5 pesetas."

The transition to the new basis was effected during the latter part of 1895 and the forepart of 1896 by royal orders of December 5 and January 27. The rate of exchange was the long-established legal, though purely nominal rate, for Mexican pesos in terms of Spanish duros, of 95 centavos to the peso — a rate representing an overvaluation of the new coin, on the basis of bullion content, of $12\frac{1}{2}$ per cent. Pending the arrival of the new money, which was coined in Spain out of silver obtained through a temporary advance from the Bank of Spain,[2] temporary certificates (*billetes de canje*) were employed in making the exchange. These certificates, which had been prepared in Spain under a decree of August 16, were issued during a brief period of 21 days in some 42 convenient places in the Island in exchange for the Mexican pesos.[3] They had coupons attached and each certificate and coupon bore the same number. As many of the certificates were given out as Mexican pesos were offered, the

[1] The size of the Spanish duro, or five-peseta piece, under the Latin Union agreement, was the same as that of the French five-franc piece, *i.e.* 25 grams .900 fine. This gave the new Porto Rican peso a fine silver content of 347.2 grains or about .9352 of that of an American silver dollar, and .921 of that of the full weight Mexican silver peso for which it was to be a substitute.

The Porto Rican fractional silver coins of 40-cents, 20-cents, 10-cents, and 5-cents were of proportionate weights with the peso, but their fineness was .835 instead of .900. Cf. Federico G. Paton: La Fabricación de las Monedas, Table 6.

[2] Cf. Castellano, pp. 41–45; Landrón, pp. 78–79; Carroll, p. 450; and Davis, Ann. Rep., 1900, p. 172.

[3] Castellano, p. 40.

coupons being retained by the exchange officer.[1] When the new Porto Rican pesos arrived the certificates were redeemed on presentation. The exchange of the new pesos for the certificates was effected in the surprisingly short period of eight days.

There had been much uncertainty as to the amount of metallic money in circulation on the Island. Estimates varied widely, some being several times as large as others. The estimate accepted by the Spanish authorities proved to be excessive. There were coined in 1895 and the forepart of 1896 at the Madrid and Sevilla mints for Porto Rico the following silver coins:[2]

Peso pieces	P 8,500,021
40 ¢ "	290,000.80
20 ¢ "	670,001.20
10 ¢ "	70,000.60
5 ¢ "	30,000.30
Total	P 9,560,023.90

Of this sum only P 6,426,395 were used. The balance were returned to Spain during the years 1896–97.[3] Furthermore, it was estimated that at the time of the American occupation about P 600,000 were taken back to Spain by Spanish soldiers. This would have left a silver circulation in Porto Rico of P 5,826,395, of which approximately P 1,000,000 consisted of fractional coins.[4]

Although the expenses of the *canje* were very large,[5] the difference between the bullion value of the new coins and that of the old ones provided a sufficient margin to give a net profit on the entire transaction of P 480,000 gold. This was sent to Porto Rico in the form of 5-peso gold

[1] Carroll, p. 450.

[2] Paton, La Fabricación de las Monedas, Table 6.

[3] Davis, Ann. Rep., 1900, p. 172; and Ann. Rep., 1899, p. 505.

[4] Few if any of the fractional silver coins minted for Porto Rico in 1895 and 1896 appear to have been taken out of the Island.

[5] Cf. Cayetano Coll y Toste Jr., in Davis, Ann. Rep., 1899, pp. 708–709.

pieces [1] legally rated to circulate at 1.20 to the peso.[2] Of this sum P 410,916 were exported to Spain in the forepart of 1898 as a contribution to the building of a Spanish cruiser to be named "Puerto Rico," which as a matter of fact was never built, leaving a balance of only P 69,084, which was kept in the Island.[3] While this sum of gold appears in most of the estimates of the Porto Rican circulation for 1898, it was in no proper sense of the word part of the circulating medium. It was rated in the market at a high premium, and held largely in hoards and as souvenirs. Occasionally money changers sold small quantities to persons returning to Spain or France.[4]

One other item in the metallic money of Porto Rico that deserves passing mention is the Spanish copper coin. Seventy thousand pesos of these Spanish copper coins were sent to Porto Rico in 1895. Being similar fractions of a less valuable monetary unit in Porto Rico than in Spain, they began to flow back to the home land under the force of Gresham's law. From 20,000 to 25,000 pesos of this copper coin was remitted by merchants to Spain, according to the Subgovernor of the Spanish Bank of Porto Rico,[5] before the authorities became aware of the fact that the coins were being exported. To avoid the further depletion of the country's copper currency the remaining copper coins were punched, and were thereby deprived of the privilege of legal circulation in Spain.

Summarizing, then, we may say that at the time of the American occupation the metallic circulation of Porto Rico in round numbers was approximately as follows:

[1] Cf. Castellano, pp. 45-47; and Landrón, pp. 77-80.
[2] Castellano, p. 51.
[3] This appears to have been distributed in the form of civil and military pensions or gratuities to old government employees in Porto Rico. Landrón, p. 79.
[4] Cf. Carroll, p. 498, also p. 456.
[5] Ibid., p. 476, and Davis, Ann. Rep., 1900, p. 172.

(1)	Porto Rican silver pesos	P 4,800,000
(2)	Fractional silver coins of the denominations 40 ¢, 20 ¢, 10 ¢, and 5 ¢	P 1,000,000
(3)	Copper coins 2 ¢ and 1 ¢, say	P 50,000
	Total	P 5,850,000
(4)	Gold coins, only nominally in circulation	69,000
		P 5,919,000

Bank Notes. In addition to the above coins there were in circulation the bank notes of the Spanish Bank of Porto Rico.[1] A decree of May 5, 1888 had conferred upon this bank the exclusive privilege of bank-note issue in Porto Rico for a period of twenty-five years. The issue was not to exceed three times the amount of the bank's paid-up capital. This capital was P 900,000 but could be increased to P 1,200,000. Prior to the American occupation the circulation is said to have exceeded P 2,500,000, but Commissioner Carroll in his preliminary report of December 1898 estimated the amount then outstanding at P 1,500,000.[2] These notes were not legal tender, but were received by the Government and normally circulated freely in the large towns. The bank was required by law to

"have constantly on hand, in current gold or silver coin, or in bars of said metals, at least the third part of the amount of the notes in circulation, and the other two thirds in securities of preferred guaranty, sure collection, and for a period not exceeding one hundred and twenty days." [3]

The notes were payable on demand at the place of issue.[4]

[1] A history of this bank, and translations of important documents relating to it, will be found in Senate Miscellaneous Documents, 56th Congress, 1st Session, XII, No. 197.

[2] Carroll, p. 450.

[3] Sen. Miscel. Doc., 56th Cong., 1st Sess., XII, No. 197, p. 6.

[4] A form of quasi paper money having a limited circulation in one city is described by Mr. T. G. J. Weymouth, a banker of Porto Rico (Carroll, p. 454): "In Ponce they use a considerable amount of paper money of the Caja de Ahorros (savings bank). They are not exactly notes; they are in the nature of bills payable at a certain date, with coupons paying interest, but they are received the same as notes by merchants and others. They do

How the New Currency System Worked. Such were the constituent elements of the Porto Rican currency immediately preceding the American occupation. The unit of value, and the money that the Spaniards called *moneda regulador*, was the new Porto Rican peso. This was a fiduciary coin, as had been its predecessor, the Mexican peso, in Porto Rico. It differed from the Mexican peso chiefly in the fact that it did not circulate outside of Porto Rico, and therefore could not be smuggled into the Island. Its supply was controlled by the Spanish authorities, and was so limited that it circulated at a gold value far above its value as bullion. Although containing nearly 8 per cent less silver than the Mexican peso it tended to circulate at a higher gold value than would the Mexican peso because: (1) by the exchange of Mexican currency for the new currency at 95 the metallic money in circulation was reduced by about 5 per cent; and (2) both the practice and the fear of illicit importations of money were eliminated.

The immediate effect of the substitution appears to have been an advance in the gold value of the peso,[1] and a great increase in the differential between bullion value and money value. For the year 1895 the average monthly differential between the bullion value of the peso (high) and the prevailing gold exchange value was 7.7 cents, while for 1896 the averge monthly differential for the new peso between the bullion value (high) and the gold exchange value (low) was 13.7 cents. Here was a case where the exchange value of an inconvertible fiduciary coin rose appreciably in spite of the fact that the silver content was decreased by about 8 per cent. The supply of money in circulation was reduced, and confidence in the money was increased. This is another illustration of Ricardo's dictum, "no depreciation except from excess." A reduction in the bullion value of an inconvertible fiduciary coin reduces the money value only

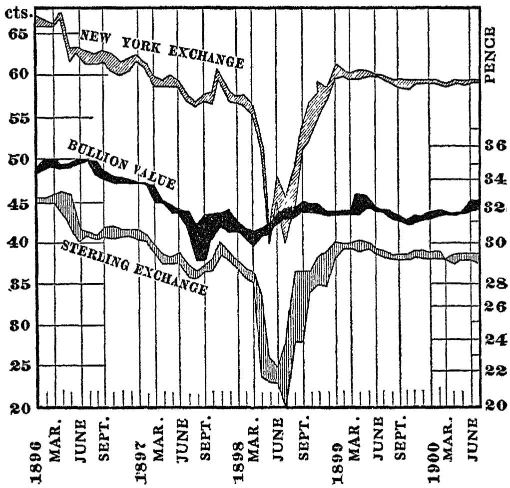
not circulate in other parts of the Island, however, and are unknown except in Ponce."

[1] Cf. chart, opposite.

when it results in an increase in the monetary supply, or a decrease in the demand (which results often from a decline in public confidence). In this instance the opposite took place, the monetary supply was reduced, and confidence in the money was strengthened. Its value accordingly rose.

The monthly movements in the exchange and bullion values of the Porto Rican peso for the next four and a half years are shown graphically on the following chart.[1]

VARIATIONS IN VALUES OF PESO, 1896–1900



A glance at the chart will show that the gold exchange value of the peso fluctuated, from January 1896 to March

[1] Curves represent high and low monthly rates. Those for New York exchange and for bullion value are measured from the schedule on the left, while that for sterling exchange is entirely separate and is measured from the schedule on the right. The rates plotted are the United States currency and sterling equivalents of the quoted rates. They are based upon actual business figures compiled for the writer through the courtesy of the American Colonial Bank of San Juan. Figures for bullion value are computed from the monthly quotations for the London price of standard silver issued by Pixley & Abell of London. The figures upon which the chart is based will be found in Appendix B, pp. 237–38.

1898, with a general downward tendency,[1] but at a level far above the bullion value of the peso. The normal differential was in the neighborhood of 13 to 16 cents, while the average differential between bullion value (high) and gold exchange value (low) for the twenty-seven months was 13.9 cents. Although the new currency was an improvement on the old in that its supply was completely under the control of the authorities, and that it was not an object of illicit trade, it was not much more stable in its gold value than the Mexican peso had been in Porto Rico during the last two years of its history there, and it was a very unsatisfactory money from the standpoint of foreign trade. Aside from the uncertainties arising from the frequent and often substantial oscillations in exchange — an evil particularly serious in a country like Porto Rico which exports such a large proportion of what it produces, and imports so much of what it consumes [2] — there was the handicap of monetary isolation. Porto Rico was a country with less than a million people, and with a total metallic circulation of less than six million pesos. None the less it had a distinctive currency of its own, and that currency was neither on a gold standard, a silver standard, nor the fiduciary standard of the Spanish home land; [3] and there was no satisfactory medium for

[1] A partial explanation of the downward tendency in the gold value of the peso was the uneasiness in business caused by the trouble in Cuba, and the consequent withdrawal of capital from Porto Rico. Another cause was the currency inflation resulting from the large bank-note issue of the Spanish Bank of Porto Rico, which is said to have reached as high a figure as P 2,580,-000 or a sum nearly half as large as the total metallic circulation of the Island. Cf. Carroll, p. 479.

[2] "Porto Rico has been an exceptional country with regard to its experiences of exchange. It is hardly possible to name any other land where oscillations so great and sudden have almost prevented foresight and calculations to such an extent that operations in exchange have resembled gambling rather than banking transactions." Carlos M. Soler, Subgovernor of the Spanish Bank of Porto Rico, in Carroll, p. 472.

[3] Spain would not accept Porto Rican money at par in settlement of Spanish trade balances, and exchange rates on Spain fluctuated widely. On October 26, 1898, for example, Spanish exchange was at a premium of 10 per

settling foreign trade balances. Porto Rican pesos could not be exported, and foreign coins could not be imported for circulation in Porto Rico. While there appears to have been some adjustment through the flow back and forth of small quantities of Spanish and French gold coins which had a ready market in Porto Rico as a sort of merchandise, the burden of adjusting international trade settlements fell heavily upon long foreign credits,[1] and upon wide fluctuations in exchange rates.[2]

Spanish American War. With the outbreak of the Spanish American War, business in Porto Rico became demoralized, foreign trade was practically stopped, and there was a great clamor on the part of foreign merchants, especially Spaniards, for means to get their capital out of Porto Rico. The demand for exchange became extremely heavy and rates soared to unprecedented heights, representing a depreciation in the gold value of the Porto Rican peso, as shown by the large dip in the chart, from 57 cents in March to 40 cents in May and July. The rate representing the lowest sterling value (namely 20 pence) was reached in July, the force under General Miles having landed July 25. When the American flag was raised over San Juan October 18, exchange had pretty well

cent and a fortnight before was at a premium of 16 per cent. Cf. Carroll, p. 457.

[1] Mr. William R. Corwine, who was sent to Porto Rico in 1899 by the Merchants Association of New York to report on commercial conditions in that Island, reported that English merchants generally gave credit for nine months on shipments to Porto Rico, Spanish and German merchants for six to nine months, while American merchants as a rule demanded cash or cash terms. Report on Porto Rico to the Merchants Association of New York. New York, June 5, 1899.

[2] Obviously an abnormally high rate of exchange (expressed in terms of pesos) favored exporters and handicapped importers, thus tending to stimulate exports and depress imports; while an abnormally low rate favored importers and handicapped exporters, thus tending to stimulate imports and depress exports. Either the high rate or the low rate, if pronounced and long continued, would tend to force the trade balance in the opposite direction. Long credit periods allowed time for different seasonal tendencies to compensate each other.

recovered, although rates were still rather nominal. By January 1899 it had entirely recovered, and the gold exchange value of the peso then attained a level slightly higher than it had had for some time prior to the War. From that time forward Porto Rican exchange was fairly constant at this level.

The depreciation of the Porto Rican peso in the spring and summer of 1898 as measured by exchange rates was great, reaching in two months as much as 30 per cent. The reader should be on his guard, however, not to over-estimate the importance of this decline. It was but temporary, and the amount of business done at these abnormal rates was small. The Subgovernor of the Spanish Bank of Porto Rico characterized the rates prevailing from April to September 1898 as "merely nominal and at the same time capricious and arbitrary." [1]

[1] Carroll, p. 473.

CHAPTER II

Currency Regulations under United States Military Government

With the landing of the American forces in Porto Rico there was created a dual currency. The five thousand Spanish troops who had been permanently stationed in the Island had been paid in Porto Rican currency out of Porto Rican revenues — a situation involving no currency difficulties; but the wages of the American troops were payable in United States currency and the funds were drawn from the United States. From the beginning, army accounts were kept in United States currency. As soon as hostilities were over there was an influx of American travelers and business prospectors, all of whom brought with them American money. This money quickly found a limited circulation in the cities and in the neighborhood of the army posts.

Confusion Caused by Various Rates between Porto Rican and United States Currency

On July 28, as soon as Ponce was occupied by the American troops, General Miles issued an order fixing the official exchange rate for the custom-house at two pesos to the dollar, or "2 to 1" as it was commonly expressed. This fifty-cent rate at the beginning was looked upon generally as reasonable, and was used by the military authorities in the purchase of supplies and in certain dealings with the natives. "For a time and in small amounts, the custom-

house would pay to those connected with the Government two pesos for each dollar turned in. . . ."[1] A reference to the chart will show that this fifty-cent gold value assigned to the peso was considerably greater than the gold value of the peso at that time as expressed in either New York or sterling exchange. It was also greater than the amount of United States currency allowed, in some places at least, in direct exchange for pesos, which was as low as 45½ cents (*i.e.* "a rate of 2.20").[2] This early low gold valuation of the peso was, however, abnormal and temporary. Shortly before the war the peso had a gold exchange value of 58 to 60 cents, and as soon as confidence began to be restored it was but natural that this fiduciary unit should appreciate to its former gold value. By referring to the chart the reader will see how rapid the reaction was. The minimum monthly gold value as measured by exchange rose from 40 cents in July to 51.3 cents in September, 54.8 cents in November, and reached 60 cents at the beginning of the new year. The 50-cent rate became a great undervaluation of the peso. The market rate gradually rose to 54 cents[3] (P 1.85), 59 cents (P 1.70), 61 cents (P 1.65), and sometimes even higher.

For some time there was great lack of uniformity, widely different rates existing in different parts of the Island, and often in different parts of the same city. Clarence Wiener, a contemporary writer in the *North American Review*, said:

"The only bank now under the jurisdiction of the Union, the only one except that of San Juan, has been giving but one hundred and seventy centavos for one dollar of the United States . . . [59 cents to P 1], but recently this rate

[1] Carroll, p. 158.

[2] General Guy V. Henry, Journal Social Science Association, Dec. 1899, p. 159.

[3] In giving these United States currency equivalents of the quoted rates which were expressed in the number of pesos to the dollar, or to the hundred dollars as given in parentheses, figures are given to the nearest cent.

was reduced to only one hundred and fifty centavos for a dollar . . . [66⅔ cents to P 1]. For several months this bank paid 1.75 : 1 [57 cents to P 1]; the merchants from 1.60 : 1 [62½ cents to P 1] to 2.00 : 1; now all dealers about Ponce have followed the lead of their bank, compelling the rate of 1.50 : 1 [66⅔ cents to P 1] for our silver, our notes and our gold." [1]

At one time it was reported that the rate in Ponce was 1.50 (66⅔ cents to P 1); that in Guayama 1.75 (57 cents to P 1); and that in San Juan 1.80 (55½ cents to P 1) for United States gold, 1.75 (57 cents to P 1) for paper, and 1.65 (61 cents to P 1) for silver.[2]

The results of such a situation are easy to imagine. In the first place, as the Government greatly undervalued the peso at the custom-house, it received few pesos in payment of duties, payments mostly being made in United States currency. On the other hand, for the Government a peso went farther than fifty cents in the purchasing of local supplies and in the hiring of native labor. Soon the customs authorities, although continuing to receive payments for duties at "2 to 1," were compelled to discontinue the practice of paying out two pesos for an American dollar even in limited quantities to persons connected with the Government. This official action, said the Military Governor, was not pleasantly received.[3] The soldier found that his American dollar would purchase much less than would two pesos.

"He would make a purchase, pay his dollar, obtaining credit at, say, 1.65, Porto Rican valuation. The Porto Rican would take the soldier's one American dollar, go to the custom-house in the payment of his duties, and obtain credit for two pesos, the soldier thus helping the Porto

[1] N. Am. Rev., Dec. 1898, p. 754.

[2] Cf. ibid., p. 755; and W. Dinwiddie, The Money of Puerto Rico, Harper's Weekly, 42 (1898), p. 1286.

[3] Henry, p. 158.

Rican some 35 centavos . . . on each payment of one dollar, and the soldier being out on each one dollar transaction, the amount gained by the Porto Rican." [1]

A merchant too might receive the dollar at P 1.50 and pay it out in the purchase of supplies in a near-by city at the rate of P 1.75, thereby making a profit on exchange of $16\frac{2}{3}$ per cent. If he received it at P 1.75 and was allowed only P 1.50 when he paid it out, he would of course suffer the corresponding exchange loss of over 14 per cent. With such different valuations in different parts of the Island, and with so much uncertainty as to the future of the peso, there naturally grew up a large amount of purely exchange speculation.[2] Dollars were bought where the rate was low and sold where it was high, and a great many business concerns other than banks are said to have gone into this money exchanging business.

Government Declares an Official Rate of 60 Cents to the Peso

To bring order out of this confusion, and at the same time to recognize the restored gold value of the peso, President McKinley issued an order on January 1, 1899,[3] fixing an official rate of 60 cents to the peso (P $1.66\frac{2}{3}$ to $1) throughout the Island. Among other things, the order provided that on and after February 1, 1899 all customs, taxes, public and postal dues in the Island of Porto Rico should be paid in United States money, or in certain foreign gold coins at established rates, or in the Porto Rican and Spanish silver coins circulating in the Island at the rate of 60 cents to the peso. It provided further that out of the Porto Rican coins so received a convenient supply should be retained and carried for exchange for United States currency at the rate of 60 cents to the peso. It declared

[1] Henry, p. 159.
[2] Cf. Wiener, p. 755.
[3] The order is given in full in Carroll, p. 496.

that all existing contracts for the payment of money in the currency of Porto Rico might be discharged in that money or in United States money at this official rate. A glance at the figures for New York and sterling exchange prevailing at the end of the year 1898, as shown on the chart, will show that the 60-cent rate was a close approximation to the exchange value of the peso at that time.

It soon appeared, however, that it was one thing to declare an official rate of equivalents for a dual currency, and another thing to make that rate effective. The Government could fix the rate at which it would receive payments in the two currencies, but, having done so, must receive the kind of currency offered, *i.e.*, the overvalued one. It could also fix a rate at which existing contracts payable in pesos could be settled in dollars. It could not, however, easily control the rates at which United States currency would be received in cash transactions, nor the price and wage adjustments which the substitution of dollars for pesos would call forth.

The market did not adequately respond to the official rate of P 1.66⅔ to $1. Merchants still held to the rate of P 1.65 or P 1.60, and sometimes to lower rates. General Henry, the Military Governor, reported that cabinet officers, judges of the courts, and subordinates complained that while they were paid in pesos, payments were exacted of them in dollars. He was compelled to recognize the market rate as against the official rate in paying some 15,000 laborers working for the Government, in order to protect them from losing on exchange.[1]

An effort was made at first to force the market to conform to the official rate. It may best be described in the words of the Military Governor who was responsible for it:[2]

"Finding this [official valuation] was not accepted outside the custom-houses, I directed the custom-houses at San

[1] Henry, pp. 159–60. [2] Ibid.

Juan, Ponce, and Mayagüez to keep on hand for exchange at the above rate, Porto Rican money. In no case was it to be exchanged for persons engaged in exchanging money for profit. So long as this exchange of money continued, it was directed [that] no person engaged in business in Porto Rico refuse to accept American money, when tendered at the rate prescribed by the President of the United States.

"In the same order [General Order No. 30, March 8, 1899] [1] it was urgently recommended that all tradesmen throughout the Island express the price of their goods in American money, with alternate prices in Porto Rican money, with due regard to the authorized rate of exchange.[2] This plan failed owing to the impossibility of keeping on hand the necessary Porto Rican money for exchange." [3]

This order also provided that, "on and after July 1, 1899, and until further orders, all public dues, insular and municipal taxes, fines and costs will be assessed in United States money. When changes in dues, salaries, etc., are not provided for, the amount of dues, salaries, etc., will be determined in accordance with the prescribed rate of exchange."

Discrimination against American National Bank Notes

There was in some places discrimination against American national bank notes.[4] No American national banks were located in Porto Rico, and there was no place at which national bank notes could be readily converted into silver

[1] Davis, Ann. Rep., 1899, p. 580.

[2] For an account of the manner in which a similar stituation was met in Manila, in 1904, see infra, pp. 329-30.

[3] At one time the plan appears to have been contemplated of coining on government account an additional stock of this domestic money to be offered freely in exchange for United States currency at the official rate. Ann. Rep. Sec. Treas., 1898, p. xci.

[4] In other places at times there was discrimination against gold and in favor of notes. This arose from the fact that notes could be shipped to the United States, for remittances, more cheaply than gold. Cf. infra, pp. 206-207; also El Billete de Banco Americano, in El Imparcial, a daily paper of Mayagüez, Porto Rico, June 6, 1899; also issues of June 14 and 24.

or gold on demand. Some of the municipalities refused to receive them in payment of taxes, and a local railroad company publicly announced that it would receive them only at the rate of P 1.63. The situation gave rise to many disputes, with the result that a military order (General Order No. 76) was issued June 10, 1899, forbidding under a heavy penalty any person who did an exchange business in Porto Rico to make different rates of exchange for different kinds of United States currency.

CHAPTER III

Formulation of a Permanent Gold Standard Plan

President McKinley's order of January 1899 was to provide merely a temporary *modus operandi* until a permanent solution of the currency problem could be worked out. There was practical unanimity among those familiar with the situation that the existing Porto Rican currency system must go. A "managed" currency system, with a fiduciary unit of value out of harmony with the gold units of international trade, and with the money supply arbitrarily regulated by government instead of automatically responding to trade demands, was clearly an anomaly for a colony possessing less than a million population. President McKinley's order of January 1, 1899 had virtually established a temporary gold standard in Porto Rico, and the advisability of placing the Island permanently upon the gold standard was not seriously questioned. One may go still farther and say that those who studied the problem were nearly unanimous in the judgment that in view of the size of the Colony, and its proximity to the United States, sooner or later the United States currency system, either complete or in a modified form, should be introduced into the Island. The differences of opinion were concerned chiefly with (1) the rate at which the Porto Rican currency should be converted into American currency, and (2) the manner of the conversion and the length of time that should be used to effect it.

The Rate of Conversion

The rate of conversion was considered important for two reasons: (1) its effect upon the holders of Porto Rican

currency, who would be required to exchange it for United States currency; (2) its effect upon the equities existing between debtors and creditors, who would be required to adjust their outstanding contracts to the new currency basis.

Holders of Porto Rican Currency. The more obvious but less important of these effects was the direct one upon the holders of Porto Rican currency. As we have seen,[1] the total amount of Porto Rican currency circulating in the Island was about P 7,350,000 (including an estimated P 1,500,000 bank notes of the Spanish Bank of Porto Rico). This money was scattered among approximately a million persons, the great bulk of whom, being poor people, held but small sums. According to the Military Governor, General Davis, there was in the vaults of local banks on August 10, 1899 P 2,691,500 in silver.[2] The wealthier classes held but little actual money, except the few who had been hoarding pesos as a speculation in the expectation that the Government would redeem them at favorable rates.[3] The man with the hoard naturally wanted a high gold rate of conversion. The small farmers, *jibaros*, as they were called, and farm laborers, who represented about three fifths of the Porto Rican population, had but little cash. The *jibaro* lived on credit,[4] and when he received cash for his crop or as wages, he spent it quickly. The farm laborer, who received his wages in cash, usually weekly, lived from hand to mouth and rarely had much cash. It was toward the coast towns that the money when paid out in the country rapidly drifted for the purchase of supplies, and, except at certain short periods of the year when settlements were being made in the interior, the great bulk of the currency was to be found in the coast cities. To the masses of people in these cities, with their small holdings of cash, a low United States currency rate was naturally objectionable

[1] Supra, p. 165.
[2] Ann. Rep., 1899, p. 506.
[3] Cf. Carroll, pp. 496–97.
[4] Ibid., p. 458.

because it would give them "less money." For example, to exchange P 6 for United States currency at par would give them $6; at 75 cents, would give them $4.50; and at 60 cents, only $3.60. Any rate below par was likely to be looked upon by the laboring classes and farmers as unfair because it required them "to give up more money than they got back." This was as far as their reasoning went. As will be seen later,[1] it contained no small element of truth.

The exchange of one's Porto Rican cash holdings for United States currency, however, would have been but a momentary matter; and, as the amounts held by most people were small, this phase of the problem of selecting a fair rate was not a very serious one.

The Rate of Conversion and Debts. The problem was much larger than merely redeeming a few millions of "counters" used in cash transactions. The controversy over the rate of conversion centered chiefly in the question of justice in the settlement of outstanding private [2] debts incurred in Porto Rican currency. It involved the adjustment of the standard of deferred payments, upon which millions of pesos of outstanding contracts were based, and the entire reorganization of a delicately adjusted system of prices and wages permeated by long-established prejudices and customs, and this in a country where 73 per cent of the male population twenty-one years of age and over could neither read nor write.

Porto Rico, like most Spanish tropical colonies, was a land of *mañana* (to-morrow); people did not pay cash if they could buy on credit, and the credit period was often long, being punctuated by several renewal dates. Porto Rico was preëminently an agricultural country. In 1900

[1] Infra, pp. 217–19.

[2] Porto Rico had no insular public debt, and the entire debt of the municipalities the Military Governor estimated at only P 1,500,000, of which about one half was secured by productive public works. Hearings before the Senate Committee on Pacific Islands and Porto Rico, 56th Congress, 1st Session, Miscellaneous Documents, IX, No. 147, pp. 41 and 62.

nearly three fourths of the male bread winners were engaged in agriculture.[1] It was, moreover, a land of small farms. Although having an area of but 3,606 square miles, or less than half (about 44 per cent) that of New Jersey, it had in 1899 39,021 farms as compared with New Jersey's 34,650 in 1900, representing an average *cultivated* area per farm of about 12¼ acres[2] as compared with 57 acres in New Jersey. The Porto Rican farmer very frequently bought his supplies of the local storekeeper on long-time credit, running from six months to a year and sometimes longer, and often settled his accounts at the crop-harvesting period by turning over to the storekeeper his crops; the storekeeper in turn had bought his supplies from the large import and export merchants on long-time credit and settled by turning over to them the produce he received from the farmer[3] — much as is the custom in some of the cotton districts in our Southern states. Many of these merchants in turn had bought their European supplies on long credit of six to nine months from the United Kingdom, Germany, France, and Spain;[4] and "these European credits enabled many merchants to help planters to settle their accounts during crop time binding themselves by mortgages on their plantations."[5]

As to the amount of these various kinds of obligations outstanding in 1899 there exist no reliable statistics. There were certain statistics of city and country mortgage loans recorded for the period 1880–90, classified according to

[1] Census of Porto Rico, 1899, p. 96.

[2] Ibid., p. 352.

[3] Cf. Carroll, p. 458.

[4] Commissioner Porter, in his Report on the Currency Question of Porto Rico (p. 4), in 1899, quotes one of the leading import and export merchants of Porto Rico as saying: "The sales are chiefly made in Porto Rico on from six months to twelve months' time, but the payment is frequently extended to a much longer time and postponed from one year to the other; and all these pending debts are contracted in Porto Rican currency, too."

[5] Report of British Vice Consul of Ponce, Porto Rico, 1900, p. 11, in British Diplomatic and Consular Reports, 1900.

the rates of interest charged, but these figures are incomplete and give no information as to the amount of mortgage loans outstanding in 1899.[1] The estimates made by the best-informed persons placed the total amount of such obligations, outstanding in 1899, at from thirty to fifty million pesos. The representative of one banking, importing, and exporting house, which Commissioner Porter in 1899 characterized as "the largest and strongest house in the whole Island,"[2] said:

"There appear to be on the Island from P 20,000,000 to P 25,000,000 of mortgage debts on real estate and land property — debts which have been contracted in the course of, let us say, the last ten years, and which extend, in many instances over still many years to come. The commercial life being very active on the Island, and being based principally on credit, even on long credit, it may be safely supposed that there is another P 25,000,000 of pending commercial debts (perhaps even more) — debts which are not guaranteed by mortgages and which extend over one to two years."[3]

The Subgovernor of the Spanish Bank of Porto Rico estimated the mortgages and private indebtedness to amount to from P 16,000,000 to P 18,000,000 in the fall of 1898, and "acceptances, drafts, and other unpaid mercantile transactions" to reach P 20,000,000 or P 25,000,000; together aggregating P 36,000,000 to P 43,000,000.[4] In October 1899 the Board of Directors of the Territorial and Agricultural Bank of Porto Rico estimated that there were "perhaps P 30,000,000 of debts, mortgages, etc., which have been contracted within the last ten years. . . ."[5] A

[1] The figures showed for 1880–90 mortgage loans on country property recorded to the number of 4,564, representing P 26,108,286, and on city property to the number of 1,267 representing P 4,938,524. Figures are tabulated in Cong. Rec., March 22, 1900, p. 3173. Cf. also infra, p. 189, note 4.

[2] Porter, p. 4.

[3] Ibid.

[4] Cf. Carroll, p. 470.

[5] Ibid., p. 489.

representative of an important German banking firm of San Juan, in October 1898, estimated the unliquidated obligations between debtor and creditor as certainly not less in amount than P 30,000,000 nor more than P 50,000,000.[1] In the absence of reliable data, this last estimate may be accepted as an intelligent guess.

These debts had been running for widely different periods of time and had greatly varied maturities. Said the Sub-governor of the Spanish Bank of Porto Rico:

"Our statutes allow us to advance money for terms of six months, but we have limited loans and discounts to a period of three months during these abnormal times. . . . Mercantile credits for goods have been given for periods of as long as two years. Some private loans on mortgage will not fall due for four, six, and even ten years. The Hypothecary Bank has loans which will not mature for ten, fifteen, and twenty years." [2]

This statement was made in October 1898, in which month the gold value of the peso varied from 53 cents to 57 cents; three months before (*i.e.*, July 1898) it varied from 40 cents to 45 cents; a year before (*i.e.*, October 1897) it varied from 57 cents to 58 cents; two years before from 60½ cents to 62½ cents; and eight years before the equivalent of the prevailing rate was 86 cents. If one assumes, as every one did in discussing the Porto Rican currency problem, that gold was stable in value during that period, then obviously the justice or injustice of any particular rate of conversion would depend upon the gold value of the peso when the debt was contracted.[3] For debts contracted in October 1890,

[1] Ibid., p. 477.

[2] Ibid., p. 476.

[3] This would not be true if it could be shown, as it probably could not for Porto Rico, that a future depreciation or appreciation in the gold value of the peso was anticipated, and to some extent consciously or unconsciously allowed for in a higher or lower interest rate. In such a contingency the gold value of the peso at the date of the debt's maturity would be one of the determining factors.

when the peso was worth about 86 cents gold, a gold rate of 86 cents might be considered reasonable; for debts contracted in October 1893, similarly a rate of conversion of 75 cents; for debts contracted in October 1897, a rate of 57½ cents; and for debts contracted in July 1898, a rate of 42½ cents.

There were those who advocated just such a plan of variable rates of conversion for the adjustment of debts, based upon the gold value of the peso at the dates when the respective debts were contracted. This plan, however, was too complicated and difficult of administration to receive serious consideration. Moreover, the plan was unsound in principle, for any such adjustment on the basis of the value of the peso at the time debts were incurred should have measured that value by its purchasing power in Porto Rico, that is, by comprehensive index numbers of Porto Rican prices and wages, not by variations in gold exchange rates. During the period 1890-99, exclusive of the brief period of the Spanish War, the gold standard had probably been almost if not quite as unstable in value as had the Porto Rican fiduciary standard. From 1890 to 1896 gold was appreciating the world over in terms of commodities, while Porto Rican currency was depreciating in terms of gold. Unfortunately, the purchasing power of the peso in Porto Rico for this period cannot be measured, as there are no index numbers of Porto Rican prices; and sufficient price data are not available to construct such an index number of any value.

Inasmuch as the only workable plan seemed to be to adopt some definite gold value as the legal rate of conversion for all outstanding debts, there naturally arose a controversy as to whether that rate should be a high gold rate or a low one. Creditors as a class, including merchants and bankers, favored a high gold rate; debtors, consisting chiefly of the agricultural population, favored a low gold rate. And on this subject class feeling in Porto Rico ran

high. The Government, through special commissioner Henry K. Carroll, received a considerable amount of verbal and written testimony on both sides of the controversy.[1]

Advocates of a High Rate of Conversion

A few went so far as to advocate conversion at par, namely, a United States dollar for each peso. Some of these took the position that intrinsically the Porto Rican peso was the same as the Spanish five-peseta piece, the chief difference being the words "Puerto Rico" instead of "España" on the coin; and they claimed that being intrinsically the same it should be redeemed at the gold value of the Spanish five-peseta piece, which they assumed to be equal to that of the United States dollar, overlooking the fact that Spanish silver was at that time (say June 22, 1899) at a discount of about 17 per cent in Spanish gold, and that five pesetas of Spanish gold were the equivalent of only 96½ cents United States gold. The Board of Directors of the Territorial and Agricultural Bank issued a statement in October 1899, favoring a high gold rate of conversion, and apparently hinting that the fact that Spain in 1895 expressed a desire ultimately to bring the Porto Rican peso into parity with the Spanish duro [2] placed a moral obligation upon the United States to convert the Porto Rican pesos at a high gold rate. The statement began:

"When the Spanish Government fixed the value of the Mexican dollar in relation to that of the national money of Spain and changed it for the provincial peso, it incurred the obligation under the decree of 1895 of assimilating later on the colonial currency into the national currency. This obligation, made in good faith, could not have been avoided. In virtue of this assimilation it would have been possible at any time to convert the colonial currency into gold at a premium of 25 per cent or 30 per cent under normal circum-

[1] Carroll, pp. 453–95.

[2] Cf. supra, pp. 161–62.

stances, and this was the original and natural solution of our monetary problem, to be given effect later on." [1]

Others advocated conversion at par from the standpoint of expediency, considering the par rate the simplest one to put in effect and the one least disturbing to the business of the Island.[2]

An influential group favored a 75-cent gold rate (*i.e.* P 1.33⅓ to $1). This group included the Spanish Bank of Porto Rico[3] and the Board of Agriculture, Manufacture, and Commerce of Porto Rico.[4] Another rate which had many advocates was 66⅔ cents (*i.e.* P 1.50 to $1). This rate was favored by several of the leading bankers [5] and by substantial gatherings of merchants, agriculturists, and others in Ponce [6] and Mayagüez.[7] Those advocating these high gold rates usually based their arguments on average rates of exchange for considerable periods of years, ignoring as abnormal and largely nominal the low gold valuations expressed in the exchange rates prevailing during the Spanish-American War period.[8] They also placed considerable emphasis upon the (alleged) danger of interfering with the economic development and prosperity of the Island by impairing capital values through conversion at too low a gold rate.[9]

[1] Carroll, p. 489.

[2] On this subject see correspondence with A. M. Seixas and others, part of which is printed in Porter's Report on the Currency Question of Porto Rico, pp. 13–15.

[3] Carroll, p. 474.

[4] Ibid., p. 488.

[5] Cf. Porter, p. 12.

[6] Carroll, p. 481.

[7] Ibid., p. 480–81.

[8] Cf. ibid., pp. 473–74, and 477.

[9] On this subject the Subgovernor of the Spanish Bank of Porto Rico said (Carroll, pp. 473–74): "Our stock of circulating medium is extremely small and . . . after the blow received when the Mexican coin was taken out of circulation at a discount of 5 per cent, for which the country has never seen any return, the country cannot see with indifference another change nor suffer another and more serious mutilation of the capital in

Advocates of a Low Rate of Conversion

Of those favoring a low gold rate of conversion the extremists advocated conversion at bullion value, which would have been in the neighborhood of 44 or 45 cents (cf. chart on page 167). Representative of their position is the following argument advanced by a man who had been engaged in mercantile pursuits in the Island for many years:

"The mainstay of this Island is its agriculture, sugar, coffee, tobacco, and cattle; and if a personal canvass were taken, you would find them (*i.e.* the farmers) as a class opposed to the absurd propositions of half a dozen banks, money brokers, and exchange and wholesale merchants regarding the change of our Porto Rico dollars.

"These parties, the holders of the Porto Rico dollars, are not petitioning for the public good, but for their sole personal benefit, and there is as much reason to change dollar for dollar as to change, as they desire, at 85 cents gold for each Porto Rico dollar, or 70 cents gold, or for any other rate that is not for its intrinsic value. Their wish is that the difference between the intrinsic value and 85 cents . . . should be paid by a tax to be levied on the Island. For what reason should the Island be taxed in order that two or three dozen men or mercantile firms who hold the Porto Rico dollars should be enriched? . . .

"For months before the United States army arrived in Porto Rico exchange on New York was from 100 per cent to

circulation. For this reason . . . if in the exchange our money were received at too low a value, capital would receive a heavy blow, and although for the moment debtors would appear to be favored in proportion, this would be imaginary only — simply the contraction of capital — and lenders would no longer be able to continue loaning to agriculturists or business men to anything like the extent they had formerly done. . . . For these and other considerations this bank [The Spanish Bank of Porto Rico] considers that the valuation of our peso at 75 cents American gold, which is equivalent to a premium of 33⅓ per cent, is a rate harmonious to both interests, and will be found conciliatory to the different elements of our economical local life."

150 per cent premium [representing a gold value to the peso of from 50 cents to 40 cents]. The sugar, coffee, tobacco, and cattle dealers, and, in fact, the whole Island, bought their supplies on credit from the merchants at prices which covered these rates of exchange; and now that the coffee and sugar crop is coming in, the merchants, brokers, and banks have combined to depreciate exchange and get it down to as low a point as possible, so as to get back from all these planters their money which they had put out at 100 per cent to 150 per cent. . . .

"The greater part of the taxpayers in this Island are the agriculturists, and it would be an outrage to change Porto Rico dollars at 85 cents or 70 cents United States currency and charge the loss to the Island budget, as it would, in fact, make the agriculturist, who has paid or bought his goods at 150 per cent, pay again the difference of those dollars from their intrinsic value to 85 cents or 70 cents United States currency."[1]

The suggestion of forcibly redeeming at bullion value fiduciary coins that had circulated for at least eight years at values far above their bullion value, except for a brief period of panic resulting from war when little business was done and when prices were largely nominal, would not be worthy of attention here, were it not for the fact that the proposal had substantial backing in Porto Rico, and that the belief that the United States intended to convert at bullion value became widespread in the Island — so widespread in fact that a flood of protests against such action was sent to Washington.[2] From the standpoint of economic justice it is difficult to see any relationship whatever between the bullion value of the peso and the fair money value at which the peso should have been converted into United States currency.

Of the low gold rates advocated, the one most frequently

[1] Carroll, pp. 481-82.

[2] Cf. J. D. Whelpley, The Currency of Porto Rico, in Forum, 27 (1899), p. 569.

urged in Porto Rico was the 50-cent rate, or "2 to 1."[1] Those who advocated it, however, generally spoke of it as the rate representing the middle ground between a rate based on bullion value and one based on the high exchange value prevailing before the war.[2] It was the rate most commonly favored by the agricultural classes. In its favor, as in favor of other low gold rates suggested, such as the bullion rate, 57 cents (P 1.75 to $1), and $55\frac{1}{2}$ cents (P 1.80 to $1), the principal arguments advanced were: (1) The one previously quoted,[3] that during the war period just passed, farmers had been compelled to sell their produce for pesos of a low gold value, to buy supplies at high war prices, and in borrowing money of banks and merchants had received pesos of a low gold value. Why, it was asked, should they now be forced to pay their creditors in money which had been arbitrarily raised in value? (2) The claim that the agricultural classes — the "really productive" classes of the Island — had been oppressed for years by the banking and mercantile classes. Much was made of the high interest rates that had been exacted of the farmers.[4]

[1] Carroll, pp. 458.
[2] Cf. ibid., pp. 480 and 482.
[3] Supra, p.187–88.
[4] The table of mortgages on country and city property in Porto Rico for the period 1880–98 (previously mentioned, p. 182, note 1) submitted by Governor Davis may be summarized as follows as regards interest rates:

Int. Rate	No. of Loans		Amount	
	Country Property	City Property	Country Property	City Property
			P 000	P 000
No interest	2,225	582	10,168	1,036
1–6 %	130	39	1,326	584
6–12 %	1,173	329	9,825	1,998
12–18 %	841	260	3,904	1,034
18–24 %	163	53	756	1,266
24 +	12	4	130	20

Cong. Rec., Mar. 22, 1900, p. 3173.

It appears from the testimony that the banks normally charged on mortgage loans from $7\frac{1}{2}$ to 9 per cent, and merchants and private money lenders charged from 9 to 24 per cent, 12 and 15 per cent being common rates. The Subgovernor of the Spanish Bank of Porto Rico testified:

"As regards rates of interest formerly prevailing, when this bank took over the business of its predecessors several years ago, the rate was 12 per cent minimum and 18 per cent maximum per annum. This rate lasted until 1878, but even now is frequent among private money lenders. Our official rate is now from 8 per cent to 9 per cent annually and private bankers rates from 9 per cent to 10 per cent."[1]

A member of the municipal council of Arecibo testified:

"The agricultural interests are in a very precarious state. Most of them are under mortgage to merchants, who are not satisfied with collecting a heavy rate of interest — at least from 12 to 15 per cent per annum — but stipulate in their mortgages that the owner of the estate shall sell to the money lender his produce at a price which is usually below the market price."[2]

The British Consul reported in 1900 that planters' mortgages to the estimated value of P 30,000,000 were held for the greater part by merchants and bankers at rates of interest from 24 per cent down to 12 per cent.[3]

Bankers and other money lenders met these criticisms by claiming that high interest rates were nothing like so common as the agriculturists maintained, and that, when they did exist, they were usually justified by the large risks involved.

Another argument advanced in favor of a low gold rate of conversion was that of the danger of smuggling — a danger to be considered later in another connection.[4] The

[1] Carroll, p. 476.
[2] Carroll, p. 502.
[3] British Diplomatic and Consular Reports, 1899, Porto Rico, p. 9.
[4] Infra, p. 197.

dies from which the Porto Rican coins were made were said still to exist in Spain, and it was argued that from these dies and possibly also from others that would be made for the purpose, a flood of counterfeit coins would come to Porto Rico to be exchanged for United States currency, should a rate of conversion much above bullion value be adopted.[1] A 60-cent gold rate would give a profit on counterfeiting of 35 to 40 per cent, even if the counterfeits were full weight and of legal fineness. This danger seemed the more threatening because of the Island's recent experience with regard to the illicit importation of Mexican pesos.[2]

Sixty-Cent Rate Adopted

The authorities, after hearing these arguments in favor of the various rates of conversion, decided to adopt the official rate which had prevailed since the order of President McKinley of January 1, 1899, *i.e.* the rate of 60 cents gold to the peso, or P1.66⅔ to $1. This was the rate recommended by Commissioner Porter in his Report of January 3, 1899,[3] and one to which the public had been accustomed for some time. Leaving out of account the war period, April to October 1898, which was entirely abnormal,[4] this rate was almost exactly the average for the five-year period 1895 to 1899 inclusive. For different periods the average[5] rates were as follows:

[1] Cf. Carroll, p. 482.

[2] Supra, pp. 158–59.

[3] Page 6.

[4] The rates which ruled for the time of the war "were panic or war rates. . . . When the war broke out nobody wanted to draw and everybody wanted to buy bills; nobody knew what would become of Porto Rico. . . . As soon as it became certain that Porto Rico would be an American country the rates of exchange went rapidly down. . . ." H. C. Fritze, quoted by Commissioner Porter, Report, p. 4.

[5] That is, the average of the monthly high and low rates 1896–99, and of the prevailing monthly rates 1890–95, as plotted on the charts on pages 158 and 167.

PERIOD	AVERAGE RATE
1890–99	65.1 cents
1890–99 (exclusive of war period April to Oct. 1898)	66.7 cents
1894–99	59.5 cents
1895–99	58.7 cents
1895–99 (exclusive of war period)	60.3 cents
1896–99	58.6 cents
1896–99 (exclusive of war period)	60.4 cents
1896–March 1898	60.7 cents
1898–99	56.0 cents

From the above it will be seen that whether one takes the average rate for the six-year period 1894–99; the five-year period 1895–99; or the four-year period 1896–99, exclusive of the war period or inclusive of it; or the two and one fourth-year period from January 1896 to March 1898; he obtains approximately the same result, that is a rate very close to 60 cents. A ten-year average gives a higher rate (65.1 cents), while a two-year average gives a lower rate (56.0 cents). From the standpoint of the effect of the rate chosen upon the conflicting interests of debtors and creditors the two-year average of 56 cents undoubtedly would have given too much weight to the war period, and have underestimated the importance of debts of long standing; while the ten-year average (65 cents) gave debts of long standing too much emphasis, since no one questioned the fact that the great bulk of the outstanding obligations did not extend back farther than five years.

The 60-cent rate had two other advantages. It was an integral decimal rate, and therefore could be easily calculated and expressed,[1] and it stood between the extremes advocated and fairly distant from both.

In the Philippines and India, countries which live largely upon their own produce, and in which import and export trade therefore is of relatively small importance as compared with domestic trade, the connection between price

[1] The peso at this valuation in terms of American cents was very conveniently divisible, for the figure 60 can be divided integrally by 2, 3, 4, 5, 6, 10, 12, 15, 30 and 60.

level and short-time fluctuations in gold exchange rates is rather remote. Most of the items in the daily budgets of the masses are chiefly local matters and have only a distant relation to gold prices abroad and to foreign exchange rates.[1] This was not true in Porto Rico. There the native's supplies — his rice, his corn, and his clothing — were largely imported; while the products of the country — the sugar, coffee, tobacco, fruits, etc. — were largely exported.[2] The result was that local wholesale prices were tied up closely to foreign prices and to foreign exchange rates, and consequently followed more closely the ups and downs of exchange than in most other countries. The average gold exchange value of the peso, in Porto Rico, therefore, was probably a better criterion of the peso's purchasing power than it would have been in most countries.

How Should the Transition to the New Currency Basis be Effected?

In addition to the rate of conversion, two other matters relating to the reform received attention. The first was the question as to whether the transition to the United States currency basis should be effected quickly or slowly; and the second, whether an American coin corresponding to the Porto Rican peso should be coined and circulated, in order to bridge over the transition [3] with the least possible disturbance. On both of these subjects the opinion of the authorities appears to have shifted between 1898 and the spring of 1900.

Secretary of the Treasury Gage in his annual report for 1898 favored the assimilation of Porto Rican currency to that of the United States, and its conversion at 60 cents to

[1] Cf. infra, pp. 325, 344–45.

[2] Cf. infra, pp. 210–11.

[3] The advisability of the permanent use in Porto Rico of an American coin of the denomination of 60 cents was also considered.

the peso; but this assimilation was to be accomplished only so rapidly as could be done "without unduly disturbing existing conditions, and contract relations in Porto Rico."[1] "It is not contemplated," he said, "in the considerations here presented to retire the Porto Rican coins: certainly not until the coins of the United States have become familiar and acceptable to the people." The Secretary was much impressed with the importance of heeding popular prejudice in such a matter as the currency, and of the danger of trying suddenly to force United States currency into circulation.

"Therefore, the peso, if received through the customs house or for other taxes, or if received in exchange for American money at the government agencies, should be again disbursed or re-exchanged as the demand from the people might require. In fact it may be necessary, in order to give absolute steadiness to the peso, not only to receive or redeem it at a fixed price to be again disbursed at the same price, but it may also be necessary to coin at our mints an additional amount of pesos and their fractional parts for use in the Island."[2]

These coins, it was contemplated, would not be copies of the Spanish Porto Rican pesos, but would bear the insignia of American sovereignty.

Commissioner Porter, in his report to Secretary Gage, favored the introduction of United States currency into circulation along with Porto Rican currency, by making it legal tender, receivable for taxes at the rate of 60 cents to the peso, and by the giving out of pesos for United States currency at this rate. He said:

" The objection to do away with all the present Porto Rican currency, exchanging it for American silver, is, as you have most aptly stated, that the day laborers are not likely to perceive the difference between the intrinsic value or mint value of a coin and its monetary par value as a division

[1] Report, pp. 89-91. [2] Ibid., p. 91.

of a gold coin. No amount of reasoning will convince them, and *the only effective object lesson must be the constant and long-continued taking and giving of the peso by the authorities at the specified rate of 60 cents.*[1] . . . If the inhabitants of the Island of Porto Rico should prefer American currency, as it is hoped they will, the pesos will soon find their way to the United States treasury. . . . If the pesos are preferred and more asked for than should be in stock at our fiscal agencies, this could be met by the coinage of a sixty-cent American silver piece, equal in size, weight and mint value to the existing Porto Rican peso."[2]

To this American peso it was contemplated giving a fixed value in relation to United States currency, and the dual character of the coin, it was often suggested, should be stamped upon it. For example, said former United States Consul Philip C. Hanna of San Juan: "On one side of the coin let it read, 'one Porto Rican peso,' and let that peso stand good for the debts of the past contracted in pesos; then . . . stamp on the other side of the coin the number of cents that this coin is worth in the money of the United States."[3] A similar object, it will be recalled, was in the mind of the Spanish minister in 1895 when he had placed on the new Porto Rican peso words implying that it was equal to five Spanish pesetas.[4]

Objections soon appeared to the plan of a *gradual* transition to the United States currency basis, either with or without the coinage of an American Porto Rican peso. One objection was the confusion and inconvenience incident to a dual currency. There were circulating at this time in the Island, United States gold coins, various kinds of United States paper money, silver dollars, fractional silver, and minor coins; also the Porto Rican peso and its fractional parts, and the bank notes of the Spanish Bank of Porto Rico. Although the official rate was 60 cents to the

[1] Italics are mine.
[2] Porter, Report, pp. 5 and 6.
[3] Carroll, p. 485.
[4] Cf. supra, pp. 161–62.

peso, or P1.66⅔ to \$1, even as late as the latter part of 1899 and the fore part of 1900 there were numerous departures from this rate, and it was common for merchants to allow only P1.65 or P1.60. For an ignorant people like the great mass of the natives, this dual system, and particularly the mingling together of fractional parts of the dollar and fractional parts of the peso, were confusing. The fact, however, should not be overlooked that most of the natives had little or nothing to do with United States currency, their small money transactions being confined almost exclusively to the local money.[1] But to the American the dual currency caused particular annoyance.[2] It was but natural therefore that there should be a demand for the speedy elimination of the dual system, and that Americans should make their desires felt at home for "the good old American currency and no other." The Subgovernor of the Spanish Bank of Porto Rico, speaking on this subject for the Bank, said as early as October 24, 1898:

"In this matter we declare ourselves frankly partisans of a change quick and radical. We say immediate because of the damage to business caused by the paralyzation induced by the uncertainty of the present state of affairs, and to signify that in our judgment the settlement should not be delayed beyond December or January next, the period coincident with that of low-priced exchange, and radical because we wish the real effective substitution for once and forever of the American dollar for the colonial peso." [3]

Some who favored prompt action none the less, advised that the conversion be not undertaken until the crop period of December to May was over, so as not to interfere with crop financing, and so as to make possible the paying

[1] Cf. infra, pp. 229–30.

[2] See Report of United States Insular Commission, on Civil Affairs in Porto Rico, to the Secretary of War, 1899, p. 17.

[3] Carroll, p. 474.

off by the agricultural interests of many of their short-time obligations to the commercial interests at the annual settlement period, before the old pesos should be withdrawn from circulation.[1]

A second argument advanced for speedy action was that if a long period were allowed for conversion, the result would be variations between the official rate and the commercial rate leading to harmful speculation.[2] It was never satisfactorily explained, however, just how such speculation would be possible if the Government should receive both kinds of money at a fixed relation to each other, and should pay out on demand in convenient places throughout the Island pesos for dollars and dollars for pesos at the official rate.

A third argument in favor of speedy action, and one upon which much emphasis was placed, was the danger of illicit coinage and importation of Porto Rican pesos. The dies from which these coins were made, as previously noted, were believed to be still in existence. The business of illicitly smuggling coins into Porto Rico had been an established one of long duration.[3] In this case it was claimed the profits would be large, *i.e.*, 35 per cent to 40 per cent, if a 60-cent gold rate were adopted, and that the Spaniards would have no scruples in thus taking advantage of Americans. "Certainly," said one witness,[4] "the Spaniards have no love for the Americans and they would not hesitate to coin large quantities of Porto Rican pesos, in full weight and fineness, when by that operation they would gain 10 to 11 cents gold per peso. There are certainly lots of Spanish firms in the Island that would help their friends to carry on such a profitable business." [5]

[1] Cf. testimony of Manuel Egozcue representing a provincial deputation. Carroll, pp. 467–468.

[2] Cf. Memorandum of Carlos M. Soler, ibid., p. 474.

[3] Supra, pp. 158–59.

[4] Carroll, p. 482.

[5] The United States Insular Commission in its report of June 1899 (cited

The danger of smuggling illicit coins into the Island may have been a real one in the Spanish days from 1886 to 1895, when the Mexican peso, which was an article of world merchandise, was circulating at a high monopoly value in Porto Rico, and when Spanish customs officials in the Island were notoriously lax in their administration, if not corrupt; and this danger may possibly have justified the great brevity with which the Spaniards carried through the currency reform of 1895. It was not, however, an adequate reason for rushing through the reform of 1900. The coin to be withdrawn was a local coin which did not circulate outside of the country, American customs administration in the Island at that time was efficient and honest, there was no proof that coins were being illegally made from the old dies and imported;[1] and were such a danger a real one, it would long since have been realized, because for over a year before the *canje* was begun the peso had been circulating in the Island at a gold value of 35 to 40 per cent above its bullion value, and had been interchangeable with United States currency at approximately that rate.

Those persons who favored immediate and rapid conversion of pesos into American currency — and the evidence

supra, p. 196) said on this subject (pp. 16–17): "It is also claimed that large amounts of silver stamped with the Porto Rican stamp, in the form of pesos, are now coming into the Island from Spain or some other country, and our attention was called to the great number of silver pesos bearing the date of 1895, all apparently new, which are now in circulation. It may be that this silver is only part of the currency which was paid to the Spanish soldiers before leaving Porto Rico, and which was carried with them to Spain [cf. supra, p. 163], and is now drifting back to the Island, but it would appear as if there is most certainly an increase in the silver of the country."

In explanation of the large amounts of new silver coins that were appearing in circulation, the Military Governor said in his Report of September 30, 1899: that up to about that time there had been lying in the banks and merchants' safes "two or three millions of Puerto Rican pesos that had never been removed from the original paper envelopes in which they were packed at the mints" (page 509).

[1] The figures for the later conversion showed that the supply of colonial money in the Island presented for redemption was slightly below the estimated figures for the amount in circulation. Cf. infra, p. 204.

seems to show that they were in the majority among those who took an active interest in the subject — naturally were opposed to the introduction of an intermediate American peso as a substitute for the Spanish Porto Rican peso. To them such a procedure seemed to be merely a method of prolonging the trouble. The introduction of an American peso at a value of 60 cents, it was argued, would require also a suitable Porto Rico-American fractional coinage, and the introduction of such a system would not only be expensive, but might clinch for a long time a dual currency for the Island.

The Porto Rican Currency Question in the United States Congress

The Congressional history of the legislation concerning Porto Rican currency demands little attention. There was not much debate on the subject, and most of what there was either was irrelevant or showed gross ignorance of the problem and of the monetary principles involved.

The provisions for the currency reform were enacted as part of the Porto Rico Civil Government Act, commonly known as the Foraker Act. On February 19, 1900 the Porto Rican Civil Government bill (H.R. 8245) came before the House in Committee of the Whole, on motion of Representative Payne of New York. It contained no provisions for currency reform. The bill was debated for several days and passed the House February 28. It was immediately reported to the Senate by Senator Foraker of Ohio, the Chairman of the Senate Committee on Pacific Islands and Porto Rico. As a matter of fact the subject had been informally considered by the Senate Committee for several months before the bill was formally reported to the Senate from the House.[1] The House bill was referred to the Senate Committee on March 1, and reported back to the Senate

[1] Cong. Rec., March 1, 1900, p. 2437.

with amendments the next day. In the bill the Senate Committee had inserted the following provisions regarding the currency:

"That for the purpose of retiring the Porto Rican coins now in circulation in Porto Rico and substituting therefor the coins of the United States, the Secretary of the Treasury is hereby authorized to redeem, on presentation in Porto Rico, all the silver coins of Porto Rico known as the peso and all other silver and copper Porto Rican coins now in circulation in Porto Rico, not including any such coins that may be imported into Porto Rico after the 1st day of February, nineteen hundred, at the present established rate of 60 cents in the coins of the United States for one peso of Porto Rican coin, and for all minor or subsidiary coins the same rate of exchange shall be applied. The Porto Rican coins so purchased or redeemed shall be recoined at the expense of the United States, under the direction of the Secretary of the Treasury, into such coins of the United States now authorized by law as he may direct, and from and after three months after the date when this act shall take effect no coins shall be a legal tender, in payment of debts thereafter contracted, for any amount in Porto Rico, except those of the United States, and whatever sum may be required to carry out the provisions hereof, and to pay all expenses that may be incurred in connection therewith, is hereby appropriated, and the Secretary of the Treasury is hereby authorized to establish such regulations and employ such agencies as may be necessary to accomplish the purposes hereof; *Provided*, *however*, That all debts owing on the date when this act shall take effect shall be payable in the coins of Porto Rico now in circulation, or in the coins of the United States at the rate of exchange above named."[1]

As previously noted, the currency provisions of the bill received scant consideration in Congress. Senator Morgan of Alabama proposed an amendment coupling with the bill

[1] Cong. Rec., March 2, 1900, p. 2469.

a provision for the free coinage of silver, when silver and gold in certain quantities were brought to the mint together. After some discussion the amendment was lost, and then the Senator proposed an amendment providing for the redemption of Porto Rican pesos in United States dollars,[1] at par, later corrected to 93½ cents,[2] when he learned that the peso contained but 93½ per cent as much pure silver as the American dollar. The reasoning naïvely ignored the money value of the two coins and viewed the coins entirely from the standpoint of their respective bullion contents. To the mind of more than one Senator the bill involved a proposal to take away 33½ cents or 40 cents of every peso owned by the poor Porto Ricans, and put it into the Treasury of the United States.[3] This amendment was lost by a vote of 33 to 12.[4] Senator Foraker of Ohio, in defending the bill, spoke of the inconveniences of a dual currency in Porto Rico, and the desire of the Porto Ricans to have but one currency, and the "apparently universal sentiment" in the Island that that currency should be the currency of the United States.

"The only question is," he said, "how can that transaction be consummated? The method provided by this bill is the only way that anybody has pointed out. Our endeavor was, after that was settled, to find a rate of exchange that would be fair to the people of Porto Rico; and inasmuch as the President had fixed 60 per cent as the rate of exchange while the two coins were in circulation there, we adopted that rate for this measure." [5]

[1] Ibid., March 29, 1900, p. 3477.

[2] Ibid., p. 3511.

[3] "Can we take from these people, poor as they are represented to be, this 40 cents in every dollar and put it into the Treasury of the United States, and go home and go to bed and sleep with our own consciences?" Senator Morgan, Cong. Rec., March 30, 1900, p. 3478.

"It not only destroys 40 per cent of the money, but we take that 40 per cent ourselves and put it into our treasury." Senator Bacon of Georgia, Cong. Rec., March 29, 1900, p. 3478.

[4] Cong. Rec., March 30, 1900, p. 3512.

[5] Cong. Rec., March 30, 1900, p. 3511.

On April 3 the Senate passed the House bill as amended, by a vote of 40 to 31, 16 not voting. The bill was returned to the House on April 4, and referred to the Committee on Ways and Means. On April 10 the Committee reported it back to the House with recommendation that the Senate's amendments be accepted. This was done on April 11, by a vote of 161 to 153, 11 answering "present" and 26 not voting.[1] On April 12 the bill received the signature of the President, and on May 1 the new Civil Government was inaugurated in Porto Rico under the governorship of Charles H. Allen.

[1] Cong. Rec., April 11, 1900, p. 4071.

CHAPTER IV

Putting the United States Currency System into Operation in Porto Rico

The work of withdrawing the old currency from circulation was handled by the United States Treasury Department. Two special agents were sent by the Department to Porto Rico. They arrived April 30, and began work the following day, the day on which the Act of April 12 went into effect. One of the two special agents, who is still in the United States Treasury Department, wrote me under date of August 30, 1915, in answer to an inquiry concerning the exchange: "We visited every important town on the Island during our four months' sojourn—holding interviews with officials, bankers, and merchants. . . . The people of the Island were notified of our presence through publications in the Porto Rican newspapers and by circulars scattered and posted by the civil officials." Banks and banking houses were appointed as agents to conduct the exchanges in San Juan, Ponce, Mayagüez, and Cayey. They were allowed 1/8 of 1 per cent on amounts exchanged, and expenses. One of the special agents spent one day in Fajardo, making exchanges for the accommodation of the eastern end of the Island and the adjacent islands. The special agent wrote: "The peons or peasants of Porto Rico had no savings, and the money we received came from the banks and merchants. There was considerable opposition, at first, to the exchange. . . ."

The time contemplated for the withdrawal of the old currency was but three months, since the law provided

that "from and after three months from the date when this Act shall take effect no coins shall be a legal tender, in payment of debts thereafter contracted, for any amount in Porto Rico, except those of the United States." About July 3 the Treasury agents received authority from the Secretary of the Treasury to continue the exchange operations after July 31.[1] They continued their work until August 20, and during that time they redeemed and shipped to the United States mint at Philadelphia P 5,470,705.[2] Upon their return to the United States the latter part of August, the banking firm of De Ford and Company of San Juan was designated to continue the exchange. It redeemed, from August 20, 1900 to June 30, 1901, P 302,996.[3] This gave a total redemption of P 5,733,701, or about P 116,000 less than the figures previously given [4] for the circulation of Spanish and Porto Rican coins in the Island, showing the fallacy of the rumors concerning the smuggling into the Island of large quantities of illicit colonial coins in 1899 and 1900.[5]

[1] La Correspondencia de Puerto Rico, San Juan, July 24, 1900.

[2] Ann. Rep. Sec. Treas., 1900, p. lxxvi.

[3] Ibid., 1901, p. 70.

[4] Supra, p. 165.

[5] The Acting Superintendent of the United States Mint at Philadelphia, the mint at which the Porto Rican money was recoined, informed the writer by letter of November 2, 1915, that the kinds of money recoined were as follows:

5-centavo pieces, equaling	4,312.27 pesos
10-centavo pieces, equaling	14,353.40 pesos
20-centavo pieces, equaling	339,265.80 pesos
40-centavo pieces, equaling	144,832.90 pesos
Peso pieces, equaling	2,889,828.25 pesos
	3,392,592.62 pesos
Mixed coin, unassorted, equaling . . .	2,307,649.10 pesos
Total silver coin	5,700,241.72 pesos
Copper bronze coin, the equivalent of .	34,126.77 pesos
Total	5,734,368.49 pesos

This total is 767.49 pesos larger than the total reported by the Secretary

As early as April 27, the Spanish Bank of Porto Rico had issued a notice to the effect that: the *canje* having been decreed, the Bank had decided to replace its present bank notes of provincial money by other notes payable in American money; and that at the opportune time current and deposit accounts would be transferred to the American currency basis. On August 11 it was announced in the newspapers that the new notes were in circulation.[1]

The work of exchanging the new currency for the old was criticized, apparently with justice, on two grounds.

Kinds and Denominations of United States Money Paid Out

It will be recalled that the money work of Porto Rico for many years had been done chiefly with coins of the denomination of a peso or less.[2] The Porto Rican bank notes, which were of large denominations, were being replaced by others payable in United States currency of equivalent value. Furthermore, the American notes already in the Island were meeting needs for money of denominations larger than a peso. One would expect then that the provincial pesos and the fractional silver and minor coins would have been redeemed in American silver dollars, fractional silver, and minor coins; and that, inasmuch as the American 50-cent piece was the coin nearest in value to

of the Treasury in 1901, — a difference which is probably to be accounted for by receipts of Porto Rican coins subsequent to June 30, 1901.

The Porto Rican coin received was recoined into United States money as follows:

Half dollars	$2,250,633.50
Quarter dollars	1,514,338.25
Dimes	1,862,635.20
Total silver	$5,627,606.95
Bronze cents	52,720.20
Total	$5,680,327.15

The recoinage was at the expense of the United States Government.

[1] La Correspondencia, San Juan, April 30 and Aug. 11, 1900.

[2] Supra, p. 165.

the provincial peso, the Government would have introduced a large amount of these pieces. A high official in the Porto Rican Government service wrote the author under date of November 4, 1915: "The American silver dollar is not popular because it always requires to be changed for the needs of the great mass of the people. It is a clumsy coin they like to get changed as rapidly as possible. The half-dollar more nearly meets their needs and is much more popular. Gold coins circulate to a very little extent."

As a matter of fact, of the $3,200,000 of United States funds which the Treasury agents paid out in exchange for the more than five million pesos of provincial coins (all of the latter being of denominations not greater in value than 60 cents in United States currency), $700,000 was in the form of exchange on New York city, and $2,500,000 in money of the following kinds and denominations:

Gold Coin:		
Double eagles	$200,000	
Eagles	500,000	
Half eagles	445,000	$1,145,000
Silver Certificates:		
Tens	300,000	
Fives	180,000	
Ones	300,000	780,000
Standard Silver Dollars:		200,000
Subsidiary Silver:		
Half dollars	125,000	
Quarters	125,000	
Dimes	50,000	300,000
Minor Coins:		
Nickels	50,000	
Cents	25,000	75,000
		$2,500,000

These are the official figures furnished the writer by one of the two Special Treasury Agents who had charge of the work. He adds: "Very little of the paper money (silver

certificates) was retained in circulation on the Island, — but [it] was almost immediately returned to this country by the bankers and merchants to meet bills."

The above figures show that of the $2,500,000 paid out, exclusive of the New York exchange, only $375,000 or 15 per cent was in denominations as small or smaller than the peso, and that $1,625,000 or 65 per cent was in denominations over eight times as large as the peso (*i.e.* of $5 or over). Although gold had not circulated readily in Porto Rico, $1,145,000 of the amount paid out was in gold coin. In his annual report of September 30, 1899 the Military Governor had said: "The funds sent here for army disbursements should be in silver, nickel, and copper. . . . Paper money soon disappears, while metallic money would be much more likely to make its way into general circulation and remain there."[1] Despite this, the treasury agents paid out $780,000 in bills, of which $480,000 were in denominations of five and ten dollars.

It would appear that the convenience of those who did the exchange work, and the immediate convenience of the large merchants and bankers who turned in the bulk of the provincial money, rather than the needs of the Porto Rican public dictated the form of United States money paid out. It is not surprising that we read in one of the daily papers of August 11 that "great scarcity exists in the entire Island of small money of silver and copper. . . . Letters which we are receiving from all parts of the Island announce the approach of serious trouble."[2]

Inadequate Number of Exchange Offices

The second ground on which the work of the exchange was criticized was the lack of a sufficient number of con-

[1] Page 506.

[2] La Correspondencia, San Juan, August 11, 1900.

Cf. also report of Dr. Jacob H. Hollander, Treasurer of Porto Rico, in First Annual Report of the Governor of Porto Rico, 1901, p. 195.

veniently located exchange offices. It appears that for the most part exchange offices were opened only in the principal cities.[1] The banks that held large supplies of the colonial money as reserves, the substantial merchants who held moderate amounts as till money, and the speculators who had been collecting and hoarding the colonial coins in the expectation of realizing a high gold rate of conversion [2] — all these brought their money with little expense and inconvenience to the exchange offices and converted it into American currency. This was also true of many of the poorer classes who lived in or near the few large cities in which exchange offices were established. But for hundreds of thousands of small farmers and peons scattered over the Island and living in places remote from the large cities the exchange resulted in real hardship. Many individual cases were cited where these people suffered heavily. An open letter to Governor Allen on the subject, dated June 25, 1900, nearly two months after the exchange work was begun, signed by a Porto Rican business house, was published in *La Correspondencia* in San Juan in its issue of June 25. The firm refers to having seen a circular issued by the Treasury agents under date of June 20, in which they request the people of the Island to go to San Juan, Ponce, or Mayagüez, the only places where exchange agencies had up to that time been established, to redeem their Porto Rican money in United States currency. It calls attention to the injustice of such a requirement to the poor people far removed from these cities, and mentions the large number of exchange offices established throughout the Island by the Spanish Government in 1895 when Spain substituted the provincial money for the Mexican money.[3]

[1] Cf. list of places previously cited, p. 203; also Davis, Ann. Rep., 1900, p. 174.

[2] Cf. Carroll, pp. 496–97.

[3] The letter refers to a recommendation contained in the Treasury agent's circular that commissions be named in each pueblo to collect the provincial money from the people, in order to exchange it at the exchange offices in the

A conservative statement of the situation is that of General Davis in his report as Military Governor for 1900:

"To get the local money from the interior to these [few] points [where the Treasury agents had established exchanges] was not easy, and the expense for transportation was considerable. This, of course, fell on the inhabitants. The peon who was so fortunate as to be the possessor of a few pesos was illiberally dealt with by the merchants or others who collected the money. False reports were circulated, and some were made to believe that if they did not turn in their pesos immediately they would soon be valueless."[1]

Although this exchange was effected at much less expense than the Spanish exchange of 1895 and a longer time was allowed, it was not managed with anything like as much convenience to the public as the Spanish *canje* in which, as we have seen,[2] exchange offices were established in some forty-two places over the Island. The work of the exchange was controlled from Washington by people unfamiliar with Porto Rican conditions, the force employed to carry on the work was altogether too small, and the length of time allowed for its accomplishment was under the circumstances inadequate.

principal cities and bring back to the people the American money received. Such a proposal the letter characterizes as simply absurd, because of the expense and labor involved, and of the unwillingness of the people to trust their hard-earned savings to such commissioners. The letter suggested that exchanges be established in all customs houses.

La Correspondencia in its issue July 30, 1900 said that it was being overwhelmed with questions from towns all over the Island as to what had been decided concerning the exchange, since the period of exchange was supposed to end that day, and there was much money not yet exchanged. It referred to Arecibo, a town of over 8000 population and of great commercial importance, as not having had any exchange agency designated for it.

[1] Report, p. 174.

[2] Supra, p. 162.

CHAPTER V

Some Economic Results of the Porto Rican Currency Reform

The economic results of the reform may be considered under the rubrics: debts, foreign trade, domestic wholesale prices, domestic retail prices, house rents, and wages. It is only upon the last three items that any considerable influence can be traced. Let us briefly consider first, however, the other items.

Debts

In the discussion of the proper rate of conversion prior to the Act of April 12, 1900, the equities between debtor and creditor played a most important rôle. After the rate was once decided upon, this subject appears to have aroused little interest. A search through Porto Rican newspapers of the year 1900 disclosed no local discussion of the subject. Of course many creditors were disappointed that the gold rate was so low as 60 cents, and many debtors, that the rate was so high. The more intelligent of both classes, however, accepted the rate as a reasonable compromise, and as it was the rate which had already been in force for nearly a year and a half there was little difficulty in commuting outstanding debts to the new currency.

Foreign Trade

As we have already seen,[1] there are few countries in the world whose prosperity rests so much on foreign trade as

[1] Supra, p. 193.

Porto Rico. Despite the backwardness of the country and the fact that nearly three fourths of its adult male population could neither read nor write, its per capita foreign trade amounted to $22.60 United States currency in 1897, and was nearly as large as that of the United States for the same year, which was but $25.36.[1] The big fact in the explanation is of course that for Porto Rico the great bulk of the trade was foreign, while for the United States the foreign trade constituted but a very small percentage of the total.

During Spanish times this Porto Rican foreign trade had been handicapped by the instability of exchange rates, but since President McKinley's proclamation of January 1, 1899 fixing the official valuation of the peso at 60 cents, exchange rates on gold standard countries had been comparatively stable. As to foreign exchange rates, therefore, the *canje* recognized a situation that had been existing for nearly a year and a half. By fixing a definite rate of conversion, however, it lessened the need on the part of exporters and importers of making forward exchange contracts as a means of protection against unfavorable exchange fluctuations pending the carrying out of their business contracts.[2]

The chief influence exerted by the *canje* upon the foreign trade of the Island appears to have been through its effect in raising wages — a subject to be considered later.[3] The higher wages measured in gold which the planters were compelled to pay increased somewhat the expense of producing sugar and tobacco, and probably put a small handicap on the export trade in these articles, because in neither article did the Island have such a monopoly (as for example the Federated Malay States had in tin at the time of the Straits Settlements currency reform in 1905)[4] that it could collect this extra expense in the form of a higher price charged

[1] Computations are made on the basis of 59 cents to the peso and the census population of 1900.

[2] Cf. infra, pp. 296–98. [3] Cf. infra, pp. 220–22. [4] Cf. infra, pp. 430–32.

to the foreign importer. On the other hand, by placing sums of larger gold value in the hands of the laborers, the *canje* may have tended to enhance slightly the demands for the imported articles they consumed.[1] There were so many other forces coming into operation at this time, however, that it is utterly impossible to disentangle their influences from that of the *canje*, and to assign to any one of them its proportionate importance. For example, the entire economic life of the Island was being revolutionized through the disruption of long-established Spanish connections and the establishment of a new insular government and new relations with the United States. The Act of April 12, 1900 substituted for the tariff laws of Spain those of the United States, and established duties of 15 per cent of the Dingley tariff rates on all merchandise passing between Porto Rico and the United States. The hurricane of August 8, 1899 — one of the worst in the history of the Island — destroyed 3500 lives and did damage to property estimated at P 36,000,000, the coffee plantations suffering the worst.[2] Under such conditions, and in view of the paucity of trade data available, it is not possible to measure statistically the influence of the *canje* upon the Island's foreign trade. It is sufficient to say that it is the judgment of the best informed Porto Ricans with whom the writer has been privileged to confer that this influence was small.

Domestic Wholesale Prices

There is no evidence that the *canje* had any appreciable influence in Porto Rico on prices in wholesale trade except

[1] But see infra, p. 217.

[2] The British Consul reported to his Government in 1900 that owing to the great damage done to the coffee plantations by the hurricane of 1899, the coffee yield on an average for the whole Island in 1900 was but one fifth of an ordinary crop. The sugar crop he reported excellent, but tobacco, he said, "since the destruction of the Cuban and Spanish outlets, through the effects of the war, has become quite a drug in the market. . . ." British Diplomatic and Consular Reports, Porto Rico, 1900, pp. 6 and 7.

possibly indirectly through its influence on wages. In the wholesale trade competition was strong and the business was largely in the hands of a few important houses. Local wholesale prices continued as before to be adjusted to the gold values of the local money, falling in nearly all cases approximately 40 per cent when the 60-cent peso was displaced by the 100-cent dollar.

Retail Prices

It was upon retail prices that the *canje* had its greatest influence. To understand this influence one must bear in mind three important facts in the economic life of Porto Rico:

(1) The great masses of the people live from hand to mouth. The country is tropical and most kinds of goods will not keep except in refrigerators. These were expensive luxuries and at this time were owned in Porto Rico only by a few of the wealthiest people. Even the *despensa*, or family cupboard, in which rice, sugar, and a few perishable foods are kept, was found in a comparatively small proportion of the homes. The laborer bought each day the food he wanted for the day, and looked with suspicion upon food that was bought yesterday.

(2) The second fact is largely a corollary of the first. Porto Rico was a land of the penny; the great bulk of the purchases being in petty amounts. In those sections (as for example in Guayama) where native servants were given an allowance of so much a day for food, in addition to money wages, the food allowance was usually 6 cents to 8 cents. A Porto Rican even to-day will buy a cent's worth of rice, a cent's worth of bread, and half-a-cent's worth of codfish, beans, or sweet potatoes. Often two cents will buy three or four different articles. In 1900 it was upon the centavo that the great bulk of the transactions fell. There was nothing like the tendency in Porto Rico that is found in

the United States for prices to break on the figures 5 and 10.

(3) During Spanish times the United States had been known in Porto Rico as a land of great wealth and of millionaires. Such Americans as visited the Island had usually spent money freely. With the American occupation, American soldiers, who were much better paid than Spanish soldiers, spent their money generously; likewise American travelers and business prospectors. Great hopes were built concerning the future of the Island, and long before there was any official change in the currency, prices and wages in Porto Rico were moving rapidly upward, as is evidenced by the numerous references in the newspapers [1] to the rising cost of living, and by the public protests that were being made against the alleged unreasonable price advances in the retail trade. This movement was in operation at the time of the beginning of the *canje*, May 1, 1900.[2]

With a setting of this kind, suddenly, within a period of a few months, the currency was converted into another currency whose coins of corresponding denomination are $66\frac{2}{3}$ per cent more valuable in terms of gold. And coins of small denominations were replaced to a large extent by money of large denominations. It must now be remembered that the natives tend to measure the value of similar

[1] See for example an article in La Correspondencia of San Juan, April 11, 1900, entitled Subida de Precios es Escandaloso, in which there is a bitter complaint against the rise in prices of necessities, and a plea for government action against the unreasonable exactions of retailers.

[2] The British Consul in his 1900 report said that "the first months of the year well kept up the universal enhancement in the prices which had set in on the American occupation. . . ." British Diplomatic and Consular Reports, 1900, Porto Rico, p. 8.

General Davis, in the hearings before the Senate Committee in January 1900, was asked a question concerning the cost of living in Porto Rico. He replied: "[It is] much higher than in the States. There are a few things which are cheaper, but most necessities are greater in price." Senate Miscellaneous Documents, 56th Congress, 1st Session, IX, No. 147, p. 76.

coins in terms of their size, and that the dollar and the dime were but little larger (namely about 7 per cent) than the peso and the ten-centavo piece, respectively; and further, that the smallest coin, the coin in terms of which most people thought and bought, was suddenly reduced to less than two thirds its former size,[1] and raised in its gold value $66\frac{2}{3}$ per cent. With these facts in mind, it can be easily understood why retail prices for small purchases should in a very large number of cases have been transferred without reduction from centavos to cents of $66\frac{2}{3}$ per cent greater value.

Although there is unfortunately lacking the evidence of accurate price statistics on this subject, the testimony of numerous responsible witnesses and of the contemporary press strongly supports this conclusion.

As was the experience a few years later in the Philippines,[2] the transfer to the new currency basis appears to have been postponed by the great majority of merchants and others to the latest date contemplated by the law.[3] A careful examination of two Porto Rican daily newspapers, *El Imparcial* of Mayagüez for the first month of the period of the *canje*, and *La Correspondencia* of San Juan for the entire period, shows that up to August 1 practically all of the prices mentioned in the papers were quoted in terms of the provincial money. There were numerous complaints of rising prices during this period,[4] May 1 to August 1; the

[1] The American cent weighed 48 grains, and the Spanish centavo (or five-centimo piece) weighed 77.16 grains.

[2] Infra, pp. 341–43.

[3] Formal efforts were early made to transfer prices to the new basis, but they appear to have been of little effect. The newspapers of May 7th and 8th (La Democracia of Ponce and La Correspondencia of San Juan) contained notices on this subject signed by various merchants. Those of Ponce declared that their transactions in the future would be on an American gold basis, but that they would naturally receive the provincial silver at the proper rate. Those of San Juan proposed to give, in separate price lists, prices in United States currency and prices in provincial money, in order that the public might see that there was a difference.

[4] Examples are: La Correspondencia of San Juan, May 8, published a protest against the raising of the prices of necessities by retailers, referred to a

cause, however, was not often directly attributed to the *canje*, but rather to the combinations of retailers and their selfishness.

On August 1 the old money ceased to be legal tender, and, as it was generally expected that the money would not be received by the Government in exchange for United States currency after July 31, the transference to the new basis was very active near the first of August. Henceforth most mercantile prices were quoted in terms of United States currency,[1] and railway rates were placed upon the new currency basis.[2] On August 1 the prices of newspapers were generally changed to the new basis, and we read in *La Correspondencia* for August 3 an announcement of a well-known pawn shop, that, although all its business up to July 31 was in provincial currency, henceforward it would be exclusively in United States currency.

From the evidence available it is impossible to tell to what extent the *canje* was used as an excuse for transferring

combination of retailers, Trust de Detalistas, and favored the formation of a League of Defense among consumers, giving notice of the opening at its editorial office of a register of protests which all classes were invited to sign. The newspaper El Pais is referred to in this issue as favoring a Union of Consumers, and a Committee of Defense against the exactions of retailers. La Correspondencia of May 9 had an article on the League (Gremio) of Retailers. In its issue of May 11 the same paper published a letter from the Federacion Regional de Obreros congratulating it on its campaign against the exactions of retailers and promising the support of the Federation. It advocated the calling of a meeting to request the organization of consumers. The issue of May 17 complained against the rise in the price of bread from four or five centavos to six centavos a pound. The same issue referred to the plan of the socialist laborers of forming in each barrio a society of some forty members to combat rising prices by buying supplies coöperatively in large quantities. El Imparcial of May 19 referred to the decision of the socialist laborers in Mayagüez to form such coöperative groups, and favored the organization of groups of other laborers to protect themselves by buying only of such establishments as charge reasonable prices. In its issue of June 21 La Correspondencia had an article on The Question of Subsistence, in which it paid particular attention to the rise in the price of bread and the exorbitant profits being realized by bakers.

[1] Cf. advertisements in La Correspondencia, Aug. 1 and 2.

[2] See announcement, ibid., July 21.

retail prices at par from provincial money to United States money. Many merchants in their advertisements made a virtue of the claim that their prices had all been transferred at the official rate, that is, reduced by 40 per cent. In some cases this claim was doubtless true, although there appears to be ground for the suspicion that in some cases at least the striking advances in prices in May and June were preparations for these later "generous reductions." If one may trust the newspaper accounts, there were many cases in which merchants in converting their prices to United States currency "split the difference," making the new prices approximately 80 per cent of the old ones. The complaints were very numerous, however, that in a large number of cases prices were transferred to the new currency without any reduction whatever. On this point a few citations from responsible sources will suffice.

General Davis wrote in his annual report as Military Governor for 1900:

"The dense ignorance of 80 per cent of the inhabitants and their general helplessness was taken advantage of by the merchants, local bankers, and employers of Labor. The poor peon who had a few pesos saved was given in exchange the United States dollars at the official rate. For P 10 he received $6; but the merchant and tradesman with whom he spent his money would seek to put him off with as little codfish, rice, or rum as he would have gotten the day before for his pesos."[1]

The first Civil Governor, Charles H. Allen, said in his first annual report, dated May 1, 1901:

"Doubtless some sort of exchange from the Spanish silver currency of Porto Rico to American currency was necessary; but coming just as it did, about one year after the hurricane,

[1] Report, p. 173.

it proved to be a hardship upon the people. This result ensued . . . from the fact that the merchants of Porto Rico were slow to recognize the difference in value between a Porto Rican peso and an American dollar. Some of them continued to charge the same prices for their goods in American money as they had previously received in the depreciated currency of Porto Rico. The fruit venders and other peddlers of small wares could not be made to understand that a Porto Rican medio was only worth three cents, and bakers gave no larger loaf of bread for an American cent than for a Porto Rican centavo. . . . So it happened that the greed of one class and the ignorance of others caused great friction in the purchase and sale of commodities and in the transaction of business. In fact, owing to the peculiar circumstances of the case, the exchange from one currency to another amounted for a time almost to the contraction of the circulating medium to the extent of 40 per cent.[1]

The second Civil Governor of Porto Rico, William H. Hunt, in a letter dated April 1, 1902, said:

"There was considerable apprehension on the part of the people and some little misunderstanding. In some places storekeepers closed their shops, because there was little or no American money to be had on August 1 in the particulár towns where such action was had and because they feared that Porto Rican money would only be taken at its bullion value after that date. Market people, omnibus drivers, street venders, storekeepers, and house owners could not understand that the new American dollar ought to have a greater purchasing power than the Porto Rican peso, and it was because of this misunderstanding and apprehension that on August 1 persons who had charged a peso for an article asked and received an American dollar. Omnibus fares, which were 10 centavos on July 31, were 10 cents on August 1. . . ."[2]

[1] Report, pp. 65–66.
[2] Quoted in Cong. Rec., June 26, 1902, p. 7461.

The British Consul said in his 1900 report that the dollar was made synonymous with the peso and that "there was an immediate rise all round of $66\frac{2}{3}$ per cent." [1]

Rents

Rents in the cities appear frequently to have been converted at par from pesos to dollars. As early as April 28 we find *La Correspondencia* advising renters in San Juan to institute a crusade against the abuse now becoming common on the part of landlords of transferring rents to an American currency basis without reduction; while on August 1 this paper had an editorial (cited more fully later, p. 222) in which it said that "the landlords have covered in gold the rent of the house. . . ." The issue of this paper for August 12 contains the following item: "Various landlords of urban properties in Arecibo [a city of 8000 population] have notified their tenants that after the first of the present month they will be expected to pay their rents in gold to the same amount as formerly in provincial money."[2] A native Porto Rican, who at one time held one of the most important engineering positions in the Island, informed the writer that the rents of several pieces of real estate which he owned in San Juan were converted to a gold basis without reduction at the time of the *canje*, and said that such conversion was the rule among the property owners with whom he was acquainted. Governor Hunt is responsible for the statement that "rentals rose, and a dollar was exacted after August 1 for every peso that had been collected the month before." [3]

This advance in rents, it should be borne in mind, how-

[1] Pp. 8–9.

[2] Four days previously this same paper published a letter saying that vigorous protests were being made against this proposal of property owners in Arecibo.

[3] Letter quoted in Cong. Rec., June 26, 1902, p. 7461.

ever, was one more step in an upward movement that had set in vigorously shortly after the American occupation.[1]

Wages

The same forces that caused the conversion of numerous retail prices from centavos to cents without change in amount tended to cause a similar conversion of wages, while the fact of the conversion of prices was itself a powerful leverage in forcing the conversion of wages. If the peon's customary living cost as many cents per day as it formerly cost centavos, and such was not far from the case in numerous instances, he naturally protested vigorously at any attempt to scale down his wages 40 per cent. In some prosperous lines of industry, like sugar, which employed more labor than any other industry in the Island, the need for labor was so great that the peon's demands for conversion at par were commonly realized; in other lines, as for example in the coffee *fincas*, which were still suffering from the disastrous effects of the hurricane, the peon was not so fortunate. There were strikes for conversion of wages at par, some of which were successful and some of which resulted in compromises.[2] The demands of labor were strengthened by the fact that the normal tendency of wages since the American occupation had been strongly upward.[3] Said General Davis in his 1900 report as Military Governor:

"The employer of labor who had been allowing wages of 50 centavos per day would only give 30 cents American,

[1] Cf. British Diplomatic and Consular Report, 1900, Porto Rico, p. 9.

[2] La Correspondencia for August 12 said that the coachmen's union of Ponce, which had declared a strike, had returned to work, having changed the schedule of rates; and that the laborers in the match factory in Mayagüez had declared a strike. The issue of August 13 said that the tailors' union of a certain small town had come to an agreement after a strike of several days.

[3] Cf. Senate Hearings, op. cit., p. 205.

which money at first had little or no more purchasing power locally than the same number of centavos. It is true there were strikes and appeals to the authorities for justice, but effective help could not be applied by any one in power. Some proprietors did make concessions, and about split the difference of the two moneys in fixing the wage rate. The field hand who had been getting 50 centavos, worth 30 cents gold, claimed 50 cents, and was allowed 40 cents gold as a compromise; but this was not an advance equal to the general increase in price of almost all necessaries of life. The sugar makers and tobacco manufacturers could afford to increase wages, but the coffee growers not only could not make any increase, but they were all so greatly embarrassed and damaged by the loss in crops for the preceding two years that a great many had practically abandoned business. The wage rate for labor in the coffee fincas had not only not increased, but not more than half the hands accustomed to secure employment could get it at any wage rate. The change of currency has worked an injury to the coffee laborers, for it has only caused confusion and hard feeling between proprietor and laborer and merchant."[1]

A report of similar tenor was made by the British Consul to his Government in 1900. He said: "Where the peso [formerly] was asked the dollar is required and freely granted in the case of English-speaking domestics, all of whom are colored. . . . Labor of all sorts in the town and port demanded and generally obtained a similar rise but not without a series of strikes." The Consul also pointed out that in the interior wages did not rise in the same proportion, and that in some districts, especially those suffering most from the hurricane, they did not rise at all.[2]

La Correspondencia of August 1, 1900 had an editorial under the title *Consumatum Est*, which said in part:

[1] Davis, Report, 1900, pp. 173–74.
[2] British Diplomatic and Consular Reports, 1900, Porto Rico, p. 9.

"The clamorous *canje* has been effected. . . . We have exchanged the *perras* for the plumed Indians. We ought to be satisfied. . . . It is true that the landlords have covered in gold the rent of the house, the cook refuses to season the *ollà* unless we give her in gold what she formerly earned in silver, the washwoman demands the same pay in gold for the washing; . . . and, since the incomes of most people have not increased, the result is a deficit in the household budget. . . . One of the great arguments for the *canje* was that it would reduce the cost of living, which was becoming very high in Porto Rico. The result, however, has been that we are paying double for all classes of service, many provisions are dearer, and others are the same, but nothing has fallen."

An interesting illustration of how some of the wage advances worked appears in a railroad announcement in *La Correspondencia* of August 6:

"To the public. Although the entire personnel of this enterprise will be paid from the 1st of August forward a dollar gold for each provincial peso formerly paid, and accordingly it would be equitable for us to convert freight and passenger rates in the same manner,[1] nevertheless, being attentive to the manifestations of the public, we have resolved to reduce rates, beginning with to-morrow, according to the following schedule: . . ."

But these rate reductions appear to have been nothing like sufficient to compensate for the increased value of the monetary unit. For example, it was pointed out[2] that from Bayamon to Viga Baja the third-class rate was formerly 70 centavos, and the new rate 63 cents, whereas a reduction proportionate to the increased value of the dollar would have given a rate of 46 cents.

[1] Note the false implication that all expenses rose in proportion to the increase in wages.

[2] La Correspondencia, Aug. 12.

Were the Price and Wage Changes Permanent?

It is customary to think of changes in prices and wages resulting from the introduction of a new unit of value as merely nominal, except for a few temporary maladjustments — friction points, as it were, in a new exchange mechanism quickly to be worn off by use. Even if these maladjustments were but temporary, it should not be overlooked that the losses (and gains) resulting from them may have been very real and permanent. A peon on a coffee plantation whose wages of P15 a month were reduced to \$9 as the result of the *canje*, and who found the prices of the goods he bought unchanged, irrecoverably lost 40 per cent of his monthly wage; and his loss was repeated each month until there was a readjustment through an increase in his wage, a reduction in prices, or both. This ultimate readjustment, however, no matter how perfect, did not restore his lost money nor blot out such evil results as the impairment of his health or that of his family, strikes, and destruction of property[1] with resulting hard feelings between employer and laborers.

In this particular reform, however, it appears that many of the supposedly temporary price and wage changes persisted — at least in part. The advances took place at a time when the tendency of both general prices and wages, for other causes, was upward; and the reform anticipated and hastened price and wage changes that were destined soon to take place anyway. On this subject Governor William H. Hunt said in a letter dated April 1, 1902:

[1] In a hearing conducted by Mr. Carroll, January 14, 1899 (Carroll, pp. 468–69), the following question and answer appeared: "Dr. Carroll — Do you think that you will not be able to induce your peons to continue their work by explaining to them that they can buy as much with the gold as they could with the nominally larger amount of silver?" Mr. Huicy [a member of the municipal council of Arecibo] — "We will have to try it, but the chances are that we will not succeed and they will strike, and strikes mean fires. There have been two instances here of that. On two estates they cut down wages 10 cents and that same day the two estates were burned."

"Naturally, business was much disturbed for a short time, but the disturbed conditions were soon adjusted with some relation to American money. I think it can be safely said, however, that there never has been, in all respects, an entire readjustment; rents, for instance, never having gone back to what they were prior to August 1, 1900. Wages are somewhat higher than they were prior to that time, but, generally speaking, all prices have risen in Porto Rico within the past eighteen months, as all conditions have much improved." [1]

Of similar purport is the statement of the after effects of the *canje* made by De Ford & Co., at that time one of the leading banking houses in Porto Rico, in a letter to Mr. Charles A. Conant, dated August 2, 1901.

It is as follows:

"The immediate effect of our advertised intention to retire the old currency was a very general raising of prices and a demand for the raising of wages among the smaller merchants, retailers, and workingmen. This lasted but a short time, however, and the prices of staple commodities, as well as the price of labor, have since worked back toward the old basis, steadily but surely. To-day we believe that a conservative opinion would say that the change in the currency is perhaps responsible for a rise in the cost of living of from 10 to 15 per cent. In some parts of the Island it is much higher, owing to combinations of capitalists, but these will undoubtedly be dissolved in time." [2]

[1] Letter is printed in Cong. Rec., June 26, 1902, p. 7461.

[2] Quoted by Charles A. Conant in his Special Report on Coinage and Banking in the Philippines, p. 119.

CHAPTER VI

Could the Plan for Converting Porto Rican Currency into United States Currency have been Improved?

One of the motives in studying a currency reform like that of Porto Rico is to get from it lessons for the future. Many currency reforms will doubtless be carried through during the present generation, especially reforms in the Orient, in South America, and in Africa. If mistakes have been made in recent reforms it is well to know them so as to avoid similar ones in the future. Many things are known to the student of Porto Rican currency to-day that were not known to those who were responsible for the reform of 1900, and the discussion which follows seeks to draw lessons for the future, not to criticize actions of the past. In the light of present knowledge, how, if at all, should the reform program of 1900 have been changed?

The Rate of Canje

In view of the resulting price and wage disturbances was the 60-cent rate of conversion a wise one? Particular attention was paid, in the discussions of 1899 and 1900 concerning the proper rate, to the question of justice to debtors and creditors and to the holders of the provincial money. To secure approximate justice for these classes it was sought to find a rate that was substantially in harmony with the gold value of the provincial money during the years immediately preceding. On this basis 60 cents gold was decided upon,

and seemed to be a rate that conformed reasonably well with the criterion of justice generally held. The carrying out of the reform, however, brought into prominence certain results whose importance had been greatly underestimated in the earlier discussions — results in the form of maladjustments in retail prices, rents, and wages. Would a foreknowledge of the character and importance of these results have called for a different rate?

If a conversion rate of 60 cents to the peso resulted in a temporary transference of numerous prices and wages at par from pesos to dollars, it would seem probable that such would have been the case with any higher rate up to par, and that the tendency to convert prices and wages at par (that is, to the same number of dollars and cents United States currency that they formerly were in provincial currency) would have been stronger somewhat in proportion as the rate were higher. The fact that the sizes of the old coins and the new ones were approximately the same (except the centavo and 5-centavo pieces) would have tended to cause the masses to look upon them as equivalent, regardless of their gold value, and to demand par rates. The nearer the actual conversion rate came to par the weaker would be the resistance of those paying the prices, the wages, and the rents to demands for the payment of par rates in the new currency. A higher gold rate than 60 cents, such as 70 cents, 80 cents, or 90 cents, therefore, would not have caused any conversions above par, but would probably have increased the number of conversions at par. The latter result would have been truer of wages, where the amounts involved were relatively large, than of retail prices where the amounts were often very small. It is doubtful whether the immediate result as regards prices of native supplies bought in amounts not exceeding a few cents' worth would have been much different with a 90-cent rate than it was with a 60-cent rate.

Carrying this same principle in the other direction, how-

ever, a point would have been reached somewhere at which conversions at par would be difficult, despite the pressure, because the amounts involved would have been so large. A 60-cent rate might result in numerous conversions at par, but how about a 45-cent rate (*i.e.* approximately the bullion rate favored by some), or even a 35-cent rate? At a 35-cent rate it is difficult to believe that there would have been many conversions at par. That would have meant bankruptcy to employers; and, in the cases where there was not a great increase in his gold wages, starvation to the laborer who was compelled to pay as many dollars and cents for his supplies as he formerly had paid pesos and centavos.

At what rate then would the most perfect immediate adjustment have taken place? The answer to this question, I believe, is the 50-cent rate; for at that rate prices would have tended to break exactly in two. Two to one is easily thinkable, and the average peon would have understood it, likewise the petty merchant and storekeeper. There would have been friction and dispute; but of all rates that would have even approximated justice between debtor and creditor a 50-cent rate would probably have caused the least temporary disturbance to existing price and wage standards.

This advantage, however, would have been bought at the expense of scaling down debts by about $16\frac{2}{3}$ per cent in gold values from the rate which appeared most equitable.[1] Possibly the advantage would have been worth the expense in view of the oppressive burdens the debtors had been carrying, and of the claim that in Porto Rico the debtors were the more productive classes. There are strong arguments on both sides of this suggestion of a 50-cent rate.

Fortunately, however, it is not necessary to try to weigh them and to find on which side the balance of advantage

[1] Another objection would have been the conversion of cash holdings at an unduly low gold rate.

lies; for there is another proposal which would have had the advantages without the disadvantages of a 50-cent conversion plan.

Suggested Improvements in Reform Plan

That proposal is analogous to the plan originally contemplated,[1] of effecting the reform slowly and introducing during the transition period Porto Rican coins with American designs. As intimated in the preceding discussion, the arguments in favor of a speedy transition to an exclusively United States currency basis had little weight.[2] That the alleged danger of counterfeiting was not serious was proved by the fact, that, after nearly a year and a half, under the American régime, of an official rate of 60 cents to the peso, giving it a value of from 35 to 40 per cent in excess of its bullion value, there was no evidence of any appreciable amount of counterfeiting,[3] and by the fact that the Treasury agents in withdrawing the old currency from circulation secured considerably less money than the estimated amount in circulation.[4] An efficient police service and an honest customs service would have been guarantees against any such danger had it arisen. Furthermore, the profits to be realized from counterfeiting United States silver coins would have been greater than from counterfeiting the Porto Rican coins. The receipt of both kinds of currency at the official rate for all taxes and public dues, and the ready interchange of both kinds for the public by various government fiscal officers at convenient places, would have prevented the market rate of exchange from varying from the official rate, and removed the alleged danger of speculation.

[1] Supra, pp. 194–95.

[2] Supra, p. 198.

[3] The writer found in the Porto Rican newspapers but one reference to the counterfeiting of coins, and the counterfeiter in that case was making both provincial and United States coins. Cf. La Correspondencia, July 13, 1899.

[4] Supra, pp. 165 and 204.

The alleged inconveniences of the dual currency during the latter part of 1899 and the fore part of 1900 the writer believes to have been greatly exaggerated in the reports that reached the United States. Brigadier General Davis, the Military Governor, said as late as September 30, 1899, in his annual report of that year:

"As respects the volume of American money now circulating [in the Island], it is impossible to furnish a satisfactory estimate. Although the army disbursements in the Island have been several millions, it is believed that most of it has been sent back to the United States. It came usually in bills, a form convenient for cheap conveyance and transmission by post. Merchants and others wishing to remit to New York or Europe are in the habit of buying American currency and sending the same to New York in registered letters, buying there European exchange for such amounts as they may wish to remit to London, Paris, or Madrid. Bank bills are therefore at a premium over American gold, for the latter can only be shipped by express at much greater cost than the postage or registration expenses of parcels by mail. . . . The army disbursements amount, approximately, to $200,000 per month, but this money inevitably drifts into the banks and does not go into circulation. The estimated amount of American money now in the bank vaults is $253,598.98, as shown by data recently obtained from the cashiers." [1]

It was the few Americans in the Island who felt most the inconveniences of the dual currency, and they were the ones whose opinions were heard in the United States. Even for them the inconveniences were of declining importance, since the natives were slowly becoming more and more familiar with the relative values of the two currencies. The great bulk of the native transactions, even down to the latter part of July 1900, were on a provincial currency basis, and most natives had little to do with United States

[1] Report, p. 506.

money.[1] Such Porto Rican newspapers for 1899 and 1900 as the writer has examined contain very few references to inconveniences arising from the dual currency. There was much discussion of the need of free trade between Porto Rico and the United States; but aside from occasional references concerning discussions of Porto Rican affairs in the United States Congress, notes on certain fiscal matters of the Military Government in Porto Rico, and advertisements of American concerns in the United States quoting gold prices, the newspaper reader would scarcely have known that there was any currency in Porto Rico except the provincial currency. There was certainly no evidence that the inconveniences of the dual currency to the Porto Ricans were such as to make an early and hurried reform urgent.

The main outlines of the plan which the writer believes should have been adopted are as follows: The official rate of 60 cents should have been early declared, and both kinds of currency should have been made legal tender and receivable for public dues at this rate. A new Porto Rican centavo and 10-centavo piece would then have been coined bearing United States-Porto Rican designs, being made similar in size and form to the corresponding Spanish-Porto Rican coins, but made easily distinguishable from the American cent and dime. These coins would have been minted in liberal quantities and generously circulated throughout the Island. After a time they would have been gradually substituted in the circulation for all the provincial coins of denominations below the peso. Meanwhile United States currency would have continued to be placed in circulation, and its use in every way encouraged. There would have been a ready interchange at numerous exchange

[1] "The peso and centavo are still the money of the people, and no great progress has been made in displacing them. Our currency, having the value of gold, is still an article of merchandise." Davis, Ann. Rep., 1899 (Sept. 30), p. 507.

offices of these new coins with pesos, and with United States money, especially of small denominations, at the official rate. In this way the masses of the people, *i.e.* those most ignorant and prejudiced in money matters, would have become accustomed to American-Porto Rican coins of the denominations which they most used, and with their correct values in relation to United States money. The objection to coining other new fractional pieces than the centavo and 10-centavo pieces would have been the expense and the undesirability of making the provincial system so convenient as to encourage its permanence. It is doubtful whether it would have been wise to coin the American-Porto Rican peso piece which was so often proposed. The existing peso was a new one and was in a good state of preservation. The fact that it bore the Spanish emblems would not have been serious if it were understood that its circulation was to be continued only a short time. Any inconvenience from a scarcity of pesos could have been met by the use of the United States currency equivalent, *i.e.* 60 cents;[1] and, if Congress would have authorized it, by the introduction of a silver certificate representing three dollars or five pesos, and payable on demand in either form at the option of the holder in San Juan. Such certificates, if issued in convenient sizes similar to those issued in 1903 in the Philippines, would almost certainly, as in the Philippines and in the Straits Settlements, have become popular, and would have rendered great assistance in the work of gradually withdrawing the peso pieces from circulation. The smaller denominations left in circulation then (after the pieces of 2, 5, 20, and 40 centavos had first been gradually withdrawn) would have been as follows,

[1] There should have been brought to the Island an ample supply of 50-cent pieces, and their use should have been encouraged. Doubtless in some cases this piece alone would have proven a substitute for the peso, resulting in a reduction in prices; while in many others it would have been received with the American dime (together making 60 cents) as a substitute for the peso.

viewed from the standpoint of the dollar unit and of the peso unit respectively:

Dollar	Name	Peso
0.006	Centavo	0.01
0.01	Cent	$0.01\frac{2}{3}$
0.06	10 Centavos	0.10
0.10	Dime	$0.16\frac{2}{3}$
0.25	Quarter	$0.41\frac{2}{3}$
0.50	Half dollar	$0.83\frac{1}{3}$
0.60	Peso	1.00
1.00	Dollar	$1.66\frac{2}{3}$
2.00	2 dollars	$3.33\frac{1}{3}$
3.00	5 pesos	5.00

From the above it will be seen that the provincial pieces (above the centavo) would have fitted conveniently and without fractions into the United States currency system, and the use of this system would have been encouraged; while the United States currency pieces (with the exception of the $3.00 — P 5.00 silver certificate suggested) would have required awkward fractions to express their values in provincial money, the money which was to be discriminated against.

Under such a plan, and the steady and tactful encouragement of the use of United States currency, the so-called dual system, within a couple years, would have become a single one, and the pieces of 1-centavo, 10-centavos, 1-peso, and 5-pesos would have become practically denominations of United States currency, *i.e.* 6-mills, 6-cents, 60-cents, and 3-dollars respectively, the other denominations of provincial money having been withdrawn from circulation. The result would have been accomplished slowly and almost imperceptibly, and there would have been little disturbance to retail prices, wages, and rents. The expense would have been very small. As soon as this result

was accomplished, the remaining Porto Rican coins of the provincial system could likewise have been slowly withdrawn from circulation, through their receipt for customs dues and internal revenue taxes.

Before any attempt was made to withdraw the centavo piece from circulation, it would have been wise to make a modification of the American system for Porto Rico, *i.e.* to introduce an American ½-cent piece — a coin for many years (1792–1857) legally coined in the United States. For a country like Porto Rico the American cent is too large a denomination for the smallest coin. It is nearly twice as valuable as the centavo, and its large value probably adds materially to the cost of living of the masses. Many an article costs a cent that would cost only a half cent, were there such a coin in circulation, and many an article costs 2 cents that would cost only 1½ cents. In fact when the United States substituted an American cent for the centavo as the minimal denomination of Porto Rican currency it withdrew from circulation the most important single coin of the poorer people of the Island. The substitution of the ½-cent for the centavo, giving 12 half-cent pieces for 10 centavos, would have been a real improvement in the American system for Porto Rico, and while it doubtless would have caused some temporary disturbance, the tendency would have been strongly in the direction of favoring the peon, for it is very probable that the ½-cent piece would have attained practically the same purchasing power which the centavo previously had.

APPENDIX A

Porto Rican Exchange Rates on New York City, and the Exchange and Bullion Values of the Mexican Peso in Terms of United States Currency, Monthly, 1890–95

Date	Exchange Value of Peso[1]		Bullion Value of Peso		Date	Exchange Value of Peso		Bullion Value of Peso	
	Rate Per Cent	U. S. Currency Equivalent	High	Low		Rate Per Cent	U. S. Currency Equivalent	High	Low
		cts.	*cts.*	*cts.*			*cts*	*cts.*	*cts.*
1890 Jan.	21	82.6	77.3	76.0	1891 Jan.	$21\frac{3}{4}$	82.1	84.0	80.7
Feb.	24	80.6	76.9	75.3	Feb.	$21\frac{1}{4}$	82.5	80.5	76.6
Mar.	23	81.3	74.4	75.4	Mar.	$20\frac{1}{4}$	83.2	78.0	76.9
April	24	80.6	82.7	75.6	April	20	83.3	77.5	75.6
May	27	78.7	81.8	79.2	May	$20\frac{1}{2}$	83.0	77.7	76.2
June	28	78.1	84.4	76.7	June	$21\frac{1}{4}$	82.5	79.2	76.2
July	26	79.4	87.6	81.9	July	$21\frac{1}{2}$	82.3	79.9	78.6
Aug.	20	83.3	93.8	87.4	Aug.	$21\frac{1}{2}$	82.3	79.4	77.6
Sept.	14	87.6	94.1	86.1	Sept.	$21\frac{1}{2}$	82.3	78.0	77.1
Oct.	16	86.1	88.7	82.9	Oct.	$21\frac{3}{4}$	2.1	77.5	75.9
Nov.	16	86.1	84.0	77.5	Nov.	$21\frac{1}{2}$	82.3	75.9	75.0
Dec.	18	84.7	85.6	81.4	Dec.	$21\frac{1}{2}$	82.3	76.2	75.0
Year, average	$21\frac{1}{2}$	82.3	83.2		Year, average	$21\frac{3}{16}$	82.5	77.6	

[1] Exchange rates express premiums in terms of percentages. For example, a rate of 21 means that 121 pesos were required to buy a sight draft on New York for $100.

Rates for the year 1890 were furnished by Fritz Lundt & Co., Bankers, of Mayagüez, Porto Rico, and refer to the first of each month. Rates for the years 1891–95 were furnished by the Spanish Bank of Porto Rico, and are the prevailing rates for each month. Cf. Carroll, pp. 473 and 479.

Porto Rican Exchange Rates — *Continued*

Date	Exchange Value of Peso		Bullion Value of Peso		Date	Exchange Value of Peso		Bullion Value of Peso	
	Rate Per Cent	U. S Currency Equivalent	High	Low		Rate Per Cent	U. S. Currency Equivalent	High	Low
		cts.	cts.	cts.			cts.	cts.	cts.
1892 Jan.	21	82.6	75.4	71.9	1894 Jan.	41	70.9	54.7	52.5
Feb.	22	82.0	72.2	70.8	Feb.	44	69.4	52.9	47.4
Mar.	22	82.0	71.7	67.2	Mar.	49	67.1	48.0	46.5
April	$22\frac{1}{2}$	81.6	69.1	67.6	April	$50\frac{1}{2}$	66.7	50.6	48.4
May	25	80.0	69.5	68.4	May	$49\frac{1}{2}$	66.9	50.4	48.3
June	$26\frac{1}{2}$	79.0	70.8	69.0	June	$50\frac{1}{2}$	66.4	49.8	48.8
July	28	78.1	69.3	67.3	July	$52\frac{1}{2}$	65.6	49.8	49.7
Aug.	31	76.3	67.3	65.2	Aug.	60	62.5	52.5	49.4
Sept.	$31\frac{1}{2}$	76.0	66.0	65.7	Sept.	61	62.1	52.1	50.3
Oct.	$32\frac{1}{2}$	75.5	68.2	65.7	Oct.	$54\frac{1}{2}$	64.7	50.9	49.8
Nov.	29	77.5	67.6	66.7	Nov.	$55\frac{3}{4}$	64.2	50.5	48.9
Dec.	31	73.3	67.5	65.4	Dec.	$56\frac{3}{4}$	63.8	49.1	46.8
Year, average	$26\frac{5}{8}$	78.8	68.5		Year, average	$52\frac{1}{16}$	65.8	49 8	
1893 Jan.	30	76.9	66.4	65.7	1895 Jan.	$57\frac{3}{4}$	63.4	47.3	46.8
Feb.	28	78.1	66.3	65.9	Feb.	82	54.9	47.7	46.9
Mar.	28	78.1	66.1	64.7	Mar.	62	61.7	51.2	47.6
April	32	75.8	66.0	65.5	April	63	61.3	53.2	51.5
May	$32\frac{1}{2}$	75.5	66.4	64.8	May	$66\frac{1}{2}$	60.1	53.2	52.0
June	40	71.4	66.7	52.5	June	71	58.5	52.9	52.0
July	$42\frac{1}{2}$	70.2	59.9	55.3	July	$72\frac{1}{2}$	58.0	52.7	52.0
Aug.	42	70.4	60.1	56.3	Aug.	73	58.0	52.6	52.1
Sept.	$41\frac{1}{2}$	70.7	59.4	58.3	Sept.	$70\frac{1}{2}$	58.7	52.6	52.4
Oct.	41	70.9	58.8	54.3	Oct.	71	58.5	54.0	52.7
Nov.	42	70.4	56.4	54.3	Nov.	66	60.2	53.4	52.7
Dec.	$42\frac{1}{2}$	70.2	55.7	54.7	Dec.	58	63.3	52.9	51.7
Year, average	$36\frac{13}{16}$	73.1	61.4		Year, average	$67\frac{3}{4}$	61.1	51.5	

APPENDIX B

Exchange and Bullion Values of Porto Rican Peso in Terms of United States Currency Monthly, 1896–1900[1]

Date	Exchange Value		Bullion Value	
	High	Low	High	Low
1896				
Jan.	67.1	65.8	48.9	48.4
Feb.	66.7	65.7	50.0	48.9
Mar.	66.2	65.7	50.0	49.3
Apr.	67.4	66.7	49.4	48.8
May	63.3	61.7	49.5	49.1
June	63.3	62.5	50.0	49.4
July	62.9	61.4	49.9	49.8
Aug.	62.5	61.4	49.7	48.2
Sept.	62.9	61.6	48.7	47.6
Oct.	62.5	60.6	48.1	47.2
Nov.	61.6	60.2	48.9	47.2
Dec.	62.1	60.6	47.6	47.3
Year	67.4	60.2	50.0	47.2
1897				
Jan.	62.5	61.7	47.3	47.1
Feb.	61.6	61.0	47.2	47.1
Mar.	59.9	58.8	47.0	44.9
Apr.	59.5	58.8	45.2	44.7
May	60.2	58.8	44.7	43.6
June	59.5	58.8	44.0	43.6
July	57.8	57.1	43.9	41.8
Aug.	56.9	56.5	42.0	37.6
Sept.	57.9	57.0	43.2	37.6

[1] The exchange value of the peso has been computed from sterling exchange rates for demand paper furnished the writer by Frank M. Welty, Vice President and Cashier of the American Colonial Bank of Porto Rico.

The bullion values of the peso have been computed from the figures for the London price of British standard silver published by Pixley and Abell, Brokers, London. United States currency equivalents of sterling prices have been computed on the basis of $4.8665 to the pound sterling.

Exchange and Bullion Values—*Continued*

Date	Exchange Value		Bullion Value	
	High	Low	High	Low
1897—*continued*				
Oct.	58.2	56.7	43.6	40.5
Nov.	61.0	59.8	43.6	41.8
Dec.	58.5	57.1	44.0	41.1
Year	62.5	56.5	47.3	37.6
1898				
Jan.	57.8	57.0	42.6	41.4
Feb.	57.8	56.6	41.6	40.6
Mar.	56.8	55.5	41.3	39.5
Apr.	52.7	51.3	41.7	40.7
May	41.0	40.0	42.6	41.0
June	48.1	45.4	43.6	42.3
July	45.5	40.0	44.2	42.8
Aug.	48.7	44.1	44.1	43.0
Sept.	54.0	51.3	44.9	43.9
Oct.	57.1	52.6	44.8	43.7
Nov.	59.5	58.0	44.9	43.6
Dec.	58.8	57.1	43.8	43.3
Year	59.5	40.0	44.9	39.5
1899				
Jan.	61.6	59.9	43.8	43.2
Feb.	61.0	60.2	43.6	43.4
Mar.	60.6	59.9	43.7	43.4
Apr.	61.0	60.0	45.8	43.4
May	61.0	60.2	45.8	44.4
June	60.6	60.1	44.4	43.9
July	60.5	59.9	44.0	43.8
Aug.	59.9	59.5	44.1	43.0
Sept.	60.0	59.0	43.4	42.7
Oct.	59.9	58.9	42.7	42.2
Nov.	59.9	59.5	43.3	42.3
Dec.	60.0	59.5	43.3	42.7
Year	61.6	58.9	45.8	42.2
1900				
Jan.	60.0	59.5	43.9	42.8
Feb.	59.7	59.5	44.0	43.3
Mar.	59.5	59.1	43.7	43.5
Apr.	59.9	59.5	43.6	43.3
May	59.9	59.3	43.8	43.6
June	60.0	59.6	45.3	43.7

APPENDIX C

Porto Rican Currency Reform. Bibliography

British Diplomatic and Consular Reports, Porto Rico, 1898–1901. London: Eyre & Spottiswoode. British Blue Books.

Carroll, H. K. Report on the Island of Porto Rico, its Population, Civil Government, etc. Washington: Superintendent of Documents, 1899.

——. What Has Been Done for Porto Rico under Military Rule? Review of Reviews, XX, 1899, pp. 705–709.

Castellano, Tomás, Ministro de Ultramar. Canje de la Moneda en Puerto Rico. Discursos Pronunciados por el Ministro de Ultramar en las Sessiones de los Dias 6 y 8 de Agosto de 1896 y en la del Senado del 11 del mismo mes y año. Madrid: Imprenta, Fundicion y Fabrica de Tintas de los Hijos de J. A. Garcia, 1896.

Coll y Toste, Cayetano, Jr. A Review of the Social, Economic, and Industrial Conditions of the Islands of Puerto Rico Immediately Preceding Occupation by the United States. Appendix I of Report of Brigadier General George W. Davis on Civil Affairs of Puerto Rico, 1899. House Documents, 56th Congress, 1st Session, VII, No. 2, Reports of War Department.

Conant, Charles A. A Special Report on Coinage and Banking in the Philippines Made to the Secretary of War. Washington: Superintendent of Documents, 1901.

Corwine, William R. Report on Porto Rico to the Merchants' Association of New York, June 5, 1899.

Davis, George W. Report of Brigadier General George W. Davis on Civil Affairs of Puerto Rico, 1899. House Documents, 56th Congress, 1st Session, VII, No. 2. Reports of War Department, pp. 505–509.

Dinwiddie, W. The Money of Puerto Rico. Harper's Weekly, XLII, 1898, p. 1286.

Director of the Mint. Annual Reports, 1899–1902. Washington: Superintendent of Documents.

El Imparcial, Mayagüez, Porto Rico. Daily Newspaper.

Governor of Porto Rico. Annual Reports, 1901 and 1902. San Juan, Porto Rico.

GRIFFIN, A. P. C., Compiler. Bibliography on Porto Rico. Senate Documents, 56th Congress, 2d Session, Document No. 222.

Hearings before the Committee on Pacific Islands and Puerto Rico of the United States Senate on Senate Bill No. 2264, to Provide a Government for the Island of Puerto Rico and for Other Purposes. Senate Miscellaneous Documents, 56th Congress, 1st Session, IX, No. 147.

HENRY, GENERAL GUY, Military Governor of Porto Rico. Remarks on "The Financial Administration of Colonial Dependencies," with particular reference to Porto Rico. Journal of Social Science, December 1899, pp. 158–163.

HITCHCOCK, F. H. Trade of Puerto Rico. Bulletin No. 13, United States Department of Agriculture, Section on Foreign Markets. Washington: Superintendent of Documents, 1896.

HOLLANDER, JACOB H. Annual Report of the Treasurer of Porto Rico, 1901. San Juan, Porto Rico.

La Correspondencia, San Juan, Porto Rico. Daily Newspaper.

La Democracia, Ponce, Porto Rico. Daily Newspaper.

LANDRÓN, RAFAEL LOPEZ. Cartas Abiertas para el Pueblo de Puerto Rico. Mayagüez, Porto Rico: Imprenta Union Obrera, 1911.

PATON, FEDERICO G. La Fabricacion de las Monedas. Madrid: J. Benito y Cerezo, 1903.

PORTER, ROBERT P., Special Commissioner for the United States to Cuba and Porto Rico. Report on the Currency Question of Porto Rico. Washington: Superintendent of Documents, 1899.

ROWE, LEO S. The United States and Porto Rico. New York: Longmans, Green, & Co., 1904.

Secretary of the Treasury. Annual Reports, 1898–1902. Washington: Superintendent of Documents.

UBEDA Y DELGADO, MANUEL. Isla de Puerto Rico, Estudio, Historico, Geographico y Estadistico de la Mesura. Puerto Rico: Establacimiento tip. del Boletin, 1878.

United States Insular Commission. Report to the Secretary of War upon Investigations Made into the Civil Affairs of the Island of Porto Rico, with Recommendations. War Department, Division of Customs and Insular Affairs, June 9, 1899. Washington: Superintendent of Documents, 1899.

VAN MIDDELDYK, R. A. The History of Puerto Rico. New York: D. Appleton & Co., 1903.

WHELPLEY, J. D. The Currency of Porto Rico. Forum, XXVII, 1899, pp. 564–569.

WIENER, C. Financial Wrong in Porto Rico. North American Review, CLXVII, 1898, pp. 754–755.

WILLOUGHBY, W. F. Territories and Dependencies of the United States. New York: The Century Company, 1905.

PART III

THE PHILIPPINE CURRENCY REFORM

CHAPTER I

Monetary Conditions prior to the American Occupation

The monetary experiences of the Philippine Islands have been scarcely less varied than those of the United States. Among the articles used as money which one finds referred to in the early records may be mentioned rice, coarse cloth,[1] metal bells brought from China,[2] silver wire rolled up like a wax taper from which pieces were cut equal in value to the price of the article being purchased,[3] gold and silver by weight,[4] and silver in pieces marked by weight.[5] Along with the wide use of barter and the extensive use of articles of universal demand as money — practices which are found even to-day in the remoter regions of the Philippines — we find evidence of both silver coin [6] and gold coin [7] circulating in the Islands as early as the last quarter of the sixteenth century. In 1627 we find that salaries of Spanish officials were expressed in pesos of gold.[8]

For the next two hundred and fifty years there appears to have been no time when silver and gold did not circulate in the Islands. The coins came from Spain, Mexico, South America, China, and India. During the early part of

[1] Blair and Robertson, The Philippine Islands, 1493–1898, LI, pp. 84–85, note.

[2] Ibid., XVI, p. 128.

[3] Ibid., XIX, p. 316.

[4] Ibid., XIII, p. 56.

[5] Ibid., XVIII, pp. 340–41, and XXXIV, p. 381.

[6] Ibid., VI, p. 28, and XIV, p. 19, and VII, pp. 154 and 202.

[7] Ibid., VII, p. 14.

[8] Ibid., XXII, pp. 228–29, and 234.

the nineteenth century it was customary to stamp them for circulation in the Philippines. A decree authorizing the circulation of gold and silver coins from Mexico, Central America, and certain South American countries, without the necessity of their being restamped, was issued in 1837.[1] Twenty years later a royal decree authorized for Manila the first and only mint ever established in the Philippines.[2] It began operations in 1861, coining only gold coins of the denominations of 4 pesos, 2 pesos, and 1 peso respectively. These gold coins, which were all .875 fine, contained 22.84 grains Troy of pure gold to the peso and were therefore equivalent to about 98.4 cents of United States money. A decree of March 5, 1862 [3] authorized the mint to recoin the silver circulating in the Philippines into coins of 50, 20, and 10 centavos. The 50-centavo piece became a very popular coin and was made unlimited legal tender. These new silver coins were .900 fine and contained 360.55 grains Troy of pure silver to the peso, giving a mint ratio with gold of 15.77 to 1.[4]

With the numerous currency decrees and ordinances of the fifteen years 1862–1877 we need not concern ourselves in this attempt to get a background for the discussion of the currency reform undertaken by the American Government a generation later. It is sufficient to note that in the Philippines, as in Europe, the decline in the value of gold resulting from the Californian and Australian output was for a time favorable to the circulation of gold and tended to drive out of circulation the heavier silver coins which at the mint ratio were undervalued. Gold appears to have been abundant in the Philippines until about 1875, when

[1] Aguilar y Biosca, Legislación sobre Moneda Filipina, p. 20.

[2] Ibid., p. 36.

[3] Ibid., p. 58.

[4] Estimates place the total coinage of gold and silver at the Manila mint down to 1876 at: gold, probably more than 20 million pesos; and silver, about one million pesos. Report of the Schurman Philippine Commission, I, pp. 144–45.

the advance in the market ratio between gold and silver throughout the world began to make itself felt in the Philippines, reversing the previous course by driving out of circulation the gold, which at the mint ratio was now undervalued, and by drawing in from abroad the overvalued silver, especially Mexican pesos.[1] By 1884 gold coin had entirely disappeared from circulation.[2]

In a communication of March 20, 1877 to the Governor-General, the Director of the Public Treasury called attention to the fact that the Mexican silver money, which from very early times had circulated freely in the country and for some time had supplied the needs resulting from the scarcity of national money, had now considerably declined in its "intrinsic value," and was rejected by many individuals and by nearly the entire commercial community[3] of Manila. "Under the circumstances," he declared, "if the Treasury should indefinitely continue to accept legally and disburse this money, it would cause injustice to its debtors and evident loss to its creditors; it would furthermore cause a disturbance in the exchanges which might convert itself into a veritable monetary crisis." Pursuant to the Director's recommendations, the Governor-General on the same day issued a decree[4] prohibiting the importation of all kinds of foreign money, authorizing for the time being the continuation of the circulation of the Mexican silver coin then in the Islands, but directing its recoinage into Spanish coin at the mint of Manila as soon as possible. In this way it was expected to control the supply of money.

From this time until after the American occupation the importation of Mexican and other foreign money was

[1] Report of Schurman Philippine Commission, I, pp. 146–47.

[2] In 1880 the British consul at Manila reported to his Government that "the gold coinage has now all but disappeared, having been replaced by Mexican and Spanish silver dollars, which still continue to be imported on a pretty large scale."

[3] Aguilar y Biosca, pp. 85–86.

[4] Ibid., p. 87.

prohibited, although there was a considerable illicit importation of Mexican pesos with the connivance, in part at least, of Spanish officials.[1] Down to the year 1905 Mexican pesos constituted a large part of the country's money supply — at the time of the American occupation probably something over half.

With the objects of preventing the exportation of Spanish-Filipino silver coin, and of bringing the money of the Philippines into closer harmony with that of the mother country, a decree was issued March 23, 1877,[2] providing that the silver which should be coined at the Manila mint should have a fineness of .835 (that is, the fineness of Spanish coin) instead of .900, as was the case before.[3] This action was ineffective for some time because it did not

[1] "When the country required currency to move off and balance the heavy exports of a good season, the only means of getting the needed money was by raising the value of the dollar [*i.e.* the peso] to a price that would enable the smugglers to bring in coin from China at a substantial profit to themselves. It was not uncommon for the dollar to go to a premium of 10 or 12 per cent, and this would immediately start the flow of silver toward the Islands, which would be continued until the demand was met and the rate of exchange was reduced to a point which caused smuggling to cease being profitable.

"The smuggling of silver into the Islands was a recognized industry. It was carried on largely by the rich 'mestizos,' or Chinese half-castes. There was a regular system for the bringing in of these coins, which would be shipped from Hong Kong in a special steamer and the cargo landed at some point north or south of Manila Bay. . . . There was nothing disgraceful in the view of the people in Manila in these practices, and those who were interested in the illicit trade will discuss their operations, telling the manner in which coins were brought in. In a convent north of Manila there were regularly equipped vaults in the basement of the building, where much of the silver was first taken. The customs officers were said to be aware of the manner of bringing in coin, and in the charges computed for the import of contraband silver was also included a 'squeeze' for the officials." Edward W. Harden, Special Commissioner of the United States, Report to the Secretary of the Treasury on the Financial and Industrial Conditions of the Philippine Islands, 1898, p. 6.

[2] Aguilar y Biosca, pp. 88 and 89.

[3] This reduction to .835 fine gave these coins a gross weight in Troy grains of 400.56 to the peso, and a pure silver content of 334.69 grains to the peso.

meet the approval of the Government at Madrid; but finally on November 23, 1880 an order was issued putting it into effect. During the next few years the mint was kept busy recoining Spanish coins, Spanish-Filipino coins, and foreign coins into pieces of 50, 20, and 10 centavos.

In 1897 the Spanish Government sent to the Philippines six million peso pieces known as Alfonsinos, coined under the same law which governed the five-peseta piece of Spain.[1] The Alfonsino contained 25 grams (385.8 grains) of silver .900 fine, giving it a pure silver content of 347.175 grains; whereas formerly the pure silver content of the coins had been 360.55 grains.

Kinds of Currency at Time of American Occupation

The kinds of currency in the Philippines at the time of the American occupation therefore may be described briefly as follows:

(1) An unknown quantity of Mexican pesos, many of which had been illicitly smuggled into the country. These pesos were of widely different dates of coinage and of different weights. Most of them, however, were comparatively recent and contained 417.7 grains of silver .9028 fine, or 377 grains of pure silver when of full weight. Their pure silver content was therefore about 1.5 per cent greater than that of the United States silver dollar, and their gross weight about 1.3 per cent greater. Many of them were badly worn.

(2) Five and a half millions of Alfonsino pesos, commonly known as Alfonsinos, having a pure silver content of 347.175 grains or 7.9 per cent less than that of the Mexican peso.

(3) An unknown quantity of silver coins of denominations of 50, 20, and 10 centavos coined in the Philippines, and containing when of full weight 334.69 grains of pure silver

[1] The royal decree providing for this coin is given in full in La Politica de España en Filipinas, March 15, 1897, VII, p. 217.

to the peso or 11.2 per cent less than the pure silver content of the Mexican peso.

(4) A miscellaneous assortment, unknown in quantity, consisting of Spanish pesos, some of them dating as far back as the eighteenth century; Spanish fractional silver coins; silver coins from Spanish America (in addition to those from Mexico above mentioned); copper coins of Spain[1] and of numerous other countries, including many from British North Borneo; and a considerable number of crudely made coppers known as Igorot coppers, which had been hammered out by the natives from copper obtained from the surface copper deposits which crop out in the northern Luzon provinces of Lepanto, Bontoc, and Nueva Vizcaya.

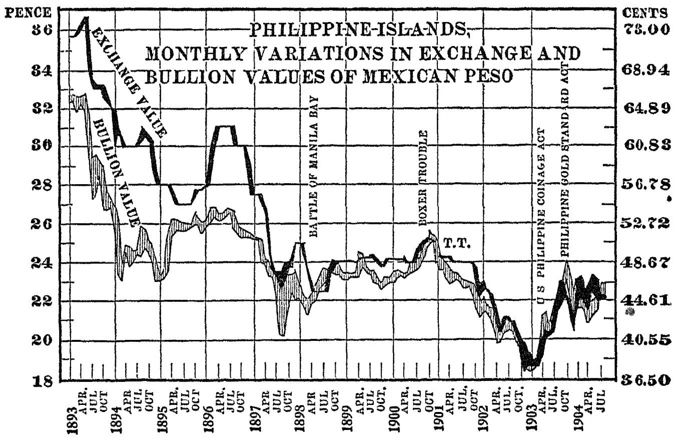
(5) About 3,400,000 pesos of asset currency bank notes issued by the Spanish-Filipino Bank of Manila, under the authority granted by a Spanish decree of 1896. This decree had continued to the Bank its monopoly of the note issue privilege, and had authorized it to issue notes to the amount of three times its capital stock of 1,500,000 pesos.

All of these different kinds of money normally circulated at a par with each other, and at a value, expressed in gold through exchange rates on gold-standard countries, well above the bullion value of the Mexican peso or its market price as coin in London. The explanation is that the supply of money was so limited that all kinds circulated at a "scarcity value" substantially above the bullion value of the dearest, *i.e.*, of the Mexican peso. The fluctuations by months in the gold value of the peso for the period January 1893 to September 1904 are shown graphically on the following chart. Exchange rates are quoted in terms of the number of English pence to the peso.[2]

[1] Just prior to the American occupation the Spanish Government brought from Spain a half million Spanish 5-centavo pieces supposedly equivalent to 1/100 of a peso in the Philippines. They were worth, however, much more for circulation in Spain and were promptly sent back.

[2] The figures for sterling exchange rates upon which the chart is based

In the interpretation of the chart allowance must be made for two facts: first, that the exchange rates cited for the period under review were for four months sight bank paper and therefore presumably higher than cable rates would have been by an amount approximately equal to interest



for five months at the London market rate; second, that quoted prices of silver used in computing bullion value are those for prompt delivery in the London market, while shipment from London to Manila normally involved shipping expenses of about one per cent and interest for about 40 days. After due allowance is made for these facts, it will be seen that the Philippine coins circulated for a considerable part of the time prior to 1897 at a value substantially higher than that of the bullion they contained in the markets of the world.[1]

were compiled by the writer from the daily records of the Manila branch of the Hongkong and Shanghai Banking Corporation through the courtesy of its manager, H. D. C. Jones. These figures, together with those for the bullion value of the peso and for sterling exchange rates in Hongkong, are given in detail by months in the writer's Second Annual Report as Chief of the Division of the Currency for the Philippine Islands, pp. 23–26.

[1] For 1894 the average exchange rate was 30.19*d.*, and the average bullion value of the Mexican peso in London was 24.59*d.*, — a difference of 22.7 per

The explanation is in limitation of quantity. Strictly speaking, the Philippines were not upon the silver standard from the time that gold disappeared from circulation in the early eighties to the time of the American occupation in 1898. They were upon a fiduciary coin standard, there being no free coinage, no free movement of money into and out of the country, and therefore no ready increase and decrease in the money supply in response to the declines and advances in the gold price of silver. Here is an excellent illustration of the oft-disputed principle of monopoly or scarcity value as applied to currency. During this period none of the Philippine currency was redeemable in gold[1] and there was little prospect of such redemption;

cent. If we reduce the former by 0.55 per cent, representing five months' interest at the average London market rate (1.3 per cent) for six months' bills, and if we raise the figure for the bullion value of the peso by 1.14 per cent, representing one per cent for transportation charges, and interest for 40 days in transit at the prevailing rate of 1.3 per cent per annum, we have for the money value and the bullion value of the peso, respectively, 30.02*d.* and 24.87*d.* This represents an average money value above the average bullion value for the year 1894 of 20.7. The corresponding figure for 1896 would be 9.3 per cent. Very substantial differences between money value and bullion value are found for the years 1890, 1892, and 1893.

To the same effect is the evidence based upon the near-by silver exchanges, as will be seen by a comparison of the sterling exchange rates in Manila, and in Hongkong for the same period, given in the Report cited in the preceding footnote.

The following extract is quoted from a report of the British Vice Consul in Manila: ". . . During the export season, when money was scarce, Manila rates would rule as high as 10 or 15 per cent over those in Hongkong and China, whence the dollars were smuggled, . . . while in the autumn exchange would fall to par in those places, there being frequently an export of Mexicans at this season to be again replaced by smuggled coins when required." Quoted in U. S. Bur. Statistics, Monthly Summary, Nov. 1899, p. 1323.

[1] An attempt was made during the seventies and eighties to put the Archipelago on the gold standard, but nothing came of it. Cf. James A. LeRoy, The Americans in the Philippines, I, p. 46.

In November 1894 the Manila Chamber of Commerce passed a petition favoring the establishment in the Philippines of a gold standard. The petition and the contemporaneous discussions did not show a very high order of intelligence on the subject of currency. Cf. La Politica de España en Filipinas, V, No. 105, pp. 37–42.

and yet Mexican pesos containing 377 grains of pure silver, Alfonsinos containing 7.9 per cent less, and Spanish-Filipino coins of lower denominations containing 11.2 per cent less pure silver to the peso, all circulated at the same value, and that a value running at times over 20 per cent above the bullion value of the Mexican peso. The cheaper coins could not drive out the dearer because there were not enough of them; or, stated differently, the Mexican pesos, because of the monetary demand and of the limitations on the quantity of the circulating media, were worth more in the Philippines than they were outside.

CHAPTER II

THE CURRENCY PROBLEM OF THE MILITARY GOVERNMENT

ALTHOUGH the Spanish fleet in Manila Bay was destroyed by Admiral Dewey May 1, 1898, not until August 13 did the American troops — approximately 11,000 in number under General Wesley E. Merritt — land and take active possession of Manila. About a week later nearly 5000 more American soldiers arrived. On August 26 the command of the American forces in the Philippines was transferred from General Merritt to Major General E. S. Otis, who held the position of Military Governor of the Philippines until succeeded by Major General MacArthur in May 1900. By the time of the outbreak of the Filipino insurrection early in February 1899 the number of American troops had increased to nearly 21,000. Although troops of the volunteer army began to return home as early as June 1899, the insurrection required the bringing out of more troops, both regular and volunteer, and by November 1900 the American military force in the Philippines amounted to about 70,000. The field of occupation for some time was limited to the city of Manila and certain of its immediate environs, but after the outbreak of the insurrection it was gradually extended to other cities and sections. The important commercial cities of Iloilo and Cebu were occupied in February 1899, and the Island of Negros was occupied two months later. According to our best authority on recent Philippine history, the late James A. LeRoy, the occupation of all the civilized provinces of northern Luzon was completed about

December 1, 1899, and by June 1901 the occupation by the American army was virtually extended to "all the old seats of Spanish authority, with the exception only of a few outposts on the border of or within the territory of the unchristianized inhabitants; and, indeed, American troops occupied, outside of the provincial capitals, innumerable towns which had never seen a command of Spanish soldiers, but only native constabulary under Spanish officers."[1]

Financial provision for this large American army required the local expenditure of much money both for wages and for supplies, while the administration of civil affairs by the military authorities called for additional large expenditures, and involved the taking over by the Military Government of the Spanish revenue system and its gradual adaptation to the new conditions. This promptly brought the military authorities face to face with a new problem, for the handling of which they had had neither training nor experience. It was the problem of adjusting their fiscal arrangements to a currency system based upon a fiduciary silver coin standard.

The problem was by no means an easy one, and in its solution the Military Government had the advantage of practically no expert assistance. An article in the *Manila Times*, which figured in official correspondence[2] during the summer of 1899, well expressed the feeling of many fiscal officers of the army. It began as follows:

"For perversities, complexities, difficulties, and impossibilities, Manila is one of the most wonderful places on the face of the earth, and it would seem that all the

[1] LeRoy, The Americans in the Philippines, II, pp. 156 and 195.

[2] Edwards, Currency and Exchange in the Philippines, pp. 15–16 (House Docs., 56th Congress, 2d Sess., 1900–01, LXXIV, Miscell. Doc. No. 160). Cited hereafter as Edwards. This is a compilation of official correspondence concerning currency matters in the Philippines from the time of the American occupation in 1898 to November 20, 1900, prepared by Clarence R. Edwards, later chief of the Bureau of Insular Affairs in the War Department.

natural cussedness of the climate and all the artificial eccentricities of the place and people are concentrated in the currency. It was bad enough in the old days, and it seemed as if it could not be worse, but now, for our sins, we are given practical proof that it could be worse, for it is. . . ."

The problem was not one of finding a satisfactory currency system for the permanent use of the Islands, for in the early days of the American occupation it was commonly believed that the United States would not permanently hold the Philippines, and the Treaty of Paris was not proclaimed until April 11, 1899; nor was it the problem of providing even temporarily a satisfactory system for the 7,000,000 people scattered throughout the Archipelago. Most of the native and Chinese population knew little or nothing about currency matters, and they were very well satisfied with the existing system, except as regards the inadequacy of the supply of small change. The immediate problem was merely that of providing a temporary *modus operandi* as regards currency for the fiscal affairs of the Military Government. Later of course the problem assumed a different character.

Broadly speaking, one may distinguish three possible plans, each of which had its advocates, although it cannot be said that there was any division of intelligent public opinion into three definite camps. Opinions were too confused for that. The three plans were as follows:

Exclusive Use of United States Currency for Fiscal Operations of Government

One plan was for the Government to go over quickly in all its fiscal arrangements to the exclusive use of United States currency. Shortly after the occupation of Manila, large supplies of United States currency had been brought to the Philippines for the purposes of paying the army and navy and the purchase of local

supplies. This money — the paper and silver but not the gold — was slowly working its way into circulation.[1] The law fixed the pay of American soldiers in United States currency, the funds with which to pay the soldiers necessarily came from the United States, and represented by far the largest single item of expenditure of the Military Government. A substantial part of the wages of the soldiers, moreover, needed to be transmitted home on a United States currency basis.[2] Americans were familiar with United States currency and did not understand "the unstable and fluctuating Filipino currency." All fluctuations in the gold value of the local silver currency were attributed to silver. During the writer's two and a half years in the Philippines he never heard the faintest suggestion that some of these fluctuations might possibly be due to variations in the value of gold. As a matter of fact, in the world's markets, silver, measured in purchasing power over commodities, was more stable in value than gold during the years 1898 to 1901 inclusive.[3] Furthermore, a large proportion of the Americans in the Philip-

[1] The Chief Paymaster of the Philippines reported that for the fiscal year ending June 30, 1899 there had been shipped to him from San Francisco: gold coin, $5,030,500; paper currency, $500,000; and silver, nickel, and copper coin, $273,800. House Doc., 56th Congress, 1st Sess., V, p. 248.

The gold disappeared from circulation very quickly.

"Payments were made almost exclusively in gold prior to January 1, 1900, but since that time the greater portion has been in United States paper currency." Annual Rep., Chief Paymaster, Division of Philippines, 1900. House Doc., 56th Congress, 2d Sess., VI, p. 136.

[2] Of the money disbursed to the troops in March 1899 by the paymaster's department about a third came back to the department either for deposit or for the purchase of drafts on the sub-treasuries in the United States.

[3] For these years the variations in the value of gold as measured by the reciprocals of the Sauerbeck index numbers of prices in England and the value of silver as measured by these index numbers converted to a silver basis at the average market prices of silver were as follows: Value of gold: 1898, 156.2; 1899, 147.0; 1900, 133.3; 1901, 142.8. Value of silver: 1898, 69.0; 1899, 66.0; 1900, 62.0; 1901, 64.0.

The world's production of silver at this period was much more stable than that of gold. Cf. Ann. Rep. Dir. Mint, 1914, p. 267.

pines could not see any reason why the American dollar should not at once follow the flag.

The great obstacle to the Government's depending upon United States currency exclusively was the fact that practically all the business of the Philippines, the buying and selling of merchandise, payment of wages, the loans, deposits, and foreign exchange operations of the banks, all were on a local currency basis. This local currency was emphatically the money of the country, and, regardless of what the Government should do in the matter of its own fiscal operations, must continue to be so for some time to come. It would have resulted in loss and much hardship and have been provocative of bitter resentment on the part of the natives to have compelled them to buy United States currency at the banks and exchange shops with which to pay taxes and other government dues, and to sell at these same banks and exchange shops for local currency the United States currency they received from the Government in payment of wages and for supplies. Exchange shops are usually not popular, and in the Philippines their unpopularity was aggravated by the fact that they were owned largely by the Chinese. Moreover the people did not think in terms of United States dollars, but in terms of local pesos, and any attempt to force rapidly the United States dollar into common use would have caused confusion and maladjustments in prices, wages, and money contracts.[1] The Filipino like most Orientals has a great respect for custom, "for what has been"; he had none too great confidence in the new invaders of his country, and this was no time to antagonize him needlessly. It might have been possible to extend to the Islands the United States currency system, but it would have been necessary to do it slowly.

[1] For a further discussion of this subject, see infra, pp. 303–304.

Use Local Currency for Fiscal Operations of Government

The second plan, and the one that probably would seem the natural one to most students of monetary science, was to recognize frankly the *status quo* as regards the Philippine monetary system until such a time as the United States should withdraw from the Islands, or, having decided to remain, should undertake a permanent reorganization of the entire currency system. After all, the number of American soldiers in the Philippines represented a very small percentage of the entire population, and as the American control should be extended to other places than Manila it would be increasingly difficult to make the American dollar follow the flag.

The obstacles, however, to the exclusive use of local currency by the military authorities were very great. In the first place there was the legal difficulty that army salaries were by law payable in United States currency. Assuming that this difficulty could have been overcome either by a liberal interpretation of the law or by new legislation, the question arose: Where would the Military Government obtain the local currency with which to make its immense payments? The Military Government's receipts from taxes and public dues represented a very small part of its expenditures. The army had to be paid out of funds drawn from the United States. There were two possible ways by which the army could supply itself with local currency. One was to obtain it from the Manila banks against the sale of drafts on United States Government funds in America. The other was for the Military Government in the Philippines (or the War Department in the United States) to undertake the purchase abroad of Mexican pesos and their shipment on army transports to the Philippines.

To the first plan, which the banks favored, there was the serious objection that the Government would be placed

at the mercy of the banks and might be exploited by the manipulation of exchange rates. There were at the time three commerical banks of consequence in Manila: the Spanish-Filipino Bank, a local institution which had been closely affiliated with the Spanish Government and had enjoyed a monopoly of the note-issue privilege, but which had little foreign exchange business except with Spain; the Manila branch of the Hongkong and Shanghai Banking Corporation, a large English corporation with branches scattered throughout the Orient and with branches also in London and New York, and with its head office in Hongkong; the Manila branch of the Chartered Bank of India, Australia, and China, an English corporation similar to the preceding one, with headquarters in London, and branches scattered throughout the Orient and one in New York. The Government's exchange operations would almost necessarily have been conducted through one or both of these two large English banks. As will be seen later,[1] the military authorities in the Philippines early came to distrust these foreign banks, and believed that they connived to exploit the Americans. Regardless of the adequacy or inadequacy of the reasons for this distrust, the distrust existed and was an insuperable obstacle to any plan for depending largely upon the banks for army funds. At best it would have been an anomalous action for the United States Military Government in the Philippines, at a time of war or insurrection, to have placed itself so completely in the hands of two foreign banks. How different would have been the situation had the United States had at that time a great central bank like those of the European countries, or had it had the present federal reserve system! Either could promptly have established branches in the Philippines, and aided the Government in its fiscal operations.

The proposal that the military authorities themselves

[1] Cf. appendix A, pp. 383–85.

should undertake directly the importation of Mexican pesos was repeatedly urged in certain quarters but was not received with favor in Washington.[1] It is very doubtful whether the fiscal officers of the Philippine Military Government, those of the War Department at Washington, or even those of the Treasury Department were properly qualified to go into the highly sensitive silver market, and "play the game" of purchasing Mexican pesos against the great oriental exchange banks. Moreover, unless the Government used this privilege merely as a whip over the banks to keep them from exploiting it, the procedure would need to be a continuing one, since the fact that the Military Government was compelled to secure its income from outside the Philippines would have led to a continual importation of Mexican dollars by the Government, regardless of the state of the local money market. This would have had the effect of keeping the local currency circulation continually redundant, and the same phenomenon would doubtless have occurred that occurred in the case of United States currency,[2] *i.e.* the banks would have been exporting Mexican pesos commercially to relieve a redundant circulation, at the very time that the Government was causing redundancy by bringing in Mexican pesos with which to make army disbursements.

Another difficulty which would have had to be overcome had the Military Government placed its fiscal operations upon a local currency basis was one in connection with the transfer of funds to the United States by soldiers. For expenditures in the Philippines local currency was more widely accepted than United States currency, and, except as regards articles imported from gold standard countries, was probably more stable in its purchasing power. To the extent that the soldiers spent their money in the Islands local currency was the preferable money; but this was not true as regards the money that the soldiers saved

[1] Cf. Edwards, pp. 10–12, 18, 19, and 38. [2] Cf. infra, pp. 264–65.

or sent to their families in America. A Mexican peso bought practically the same amount of local supplies in the Philippines when exchange with United States currency stood at Pfs.[1] 2.27 to $1.00 as when it stood at Pfs. 2.00 to $1.00; but in the latter case it could be transferred home as approximately $0.50, and in the former only as $0.44. Had the Government placed wages upon a local currency basis, it would almost certainly have been compelled to adopt some such plan as that followed by certain of the large European banks and commercial houses in the Orient, which agreed to transfer to the home land on request a certain part of the wages of their European employees on a fixed exchange basis with gold.[2]

[1] Executive order No. 66 issued by the Civil Governor August 3, 1903 made the official designation for local currency "Pfs.," that for United States currency "$," and that for the new United States Philippine currency which had just begun to be placed in circulation "P." These symbols will be used throughout the remainder of this paper. See Executive Orders and Proclamations, 1903, p. 89.

[2] This plan is of sufficient importance to deserve a brief description. The following description was given to the writer in 1904 by the manager of the Manila branch of one of the large English exchange banks: An amount equivalent to about 32 per cent of the regular salary is given to European employees each year to allow for the depreciated gold value of the dollar. The origin of this allowance was as follows: Salaries in the early days were fixed in Mexican dollars before the gold value of that dollar had depreciated through the fall in the price of silver. As a result of this depreciation, employees of the Bank found the gold values of their incomes rapidly declining and requested that their salaries be fixed upon the gold basis. The directors of the Bank maintained that although the purchasing power of the Mexican dollar over imported goods or in the home land had greatly depreciated [?], its purchasing power in the colonies themselves and other places throughout the Orient over local produce, labor, etc., had not materially declined. They reasoned that the employees of the Bank expended about one half of their salaries for house-rents, domestic foods, other purely local supplies, and servants, and that the other half was sent home or invested in goods imported from gold-standard countries. They accordingly agreed to permit all European employees of the Bank to purchase sterling drafts of the Bank to the amount of half their salaries at the rate of three shillings and four pence to the dollar. These drafts could be commuted into local currency at the rate of the day if the employee wishes to spend this exchange allowance in the Philippines.

Use of Both United States Currency and Local Currency for Fiscal Operations of Government

The third plan was a combination of the other two, *i.e.* the adoption of both local currency and United States currency.

Being confronted with the horns of an awkward dilemma the Military Government adopted the proverbial Anglo-Saxon course and tried to seize both of them, a course which as a permanent arrangement would have been intolerable, but which as a makeshift for a few years was endurable, thanks largely to the unusual stability of the silver market during the fiscal years 1899 and 1900.[1]

It is difficult to describe, at once briefly and accurately, the plan followed, because different departments of the Military Government followed quite different plans, and the same department often shifted from one plan to another. During the entire period of the Military Government and the early part of that of the Civil Government there was confusion in the matter of the ratio in which one currency should be computed in terms of the other in receipts and expenditures and in the accounting of fiscal officers.[2] Paymaster-General A. E. Bates, in a letter to the Secretary of War, October 17, 1900, said:[3]

[1] The range between the highest and lowest London price of silver for the two years was only 7.8 per cent. Cf. chart, p. 251.

[2] A letter of the Military Auditor to the Secretary of the Military Governor, October 23, 1899, said: "At the present time there are four different rates of conversions.

1. The rate telegraphed from Washington to the chief quartermaster of this department and used in the quartermaster's department here, \$0.474 in gold for 1 Mexican dollar or peso.

2. The rate used by the subsistence department, \$0.481, a rate formerly in use by that department, and ordered continued by the Governor-General in the Philippines.

3. The rate used at the custom-house in the payment of employees whose salaries are fixed in gold, \$0.50.

4. The bank rate, to-day \$0.485, necessarily used by the Treasurer should he have to deposit gold and take credit in Mexican. . . ." Edwards, p. 36.

[3] Edwards, pp. 61–62.

"The difficulties in connection with the confused state of the currency in the Philippines arise in adjusting and auditing the accounts of the collecting and disbursing officers in the Islands by the auditor in Washington, where all accounts are required to be stated in terms of United States currency. The Insular Government has no difficulty as long as they receive and pay out the money of the Islands at its nominal value. There is no difficulty with the departments of the army as long as . . . they confine their transactions exclusively to the United States currency. The trouble arises when it is necessary to use money for the purchase of supplies or the payment of native labor, and with the individuals who receive their pay in gold and are obliged to convert it into the currency of the country."

Into the details of this confused situation we need not go. The reader who is interested in them will find a mass of correspondence on the subject carefully collected by Clarence R. Edwards in the pamphlet on *Currency and Exchange* in the Philippines, already cited several times. Here we shall concern ourselves only with a few of the chief events.

The first and most important fact to note is that the paymaster's department of the army maintained itself throughout the entire period upon a United States currency basis. Its receipts were in United States currency, and were mainly obtained by direct shipment from America, at first of gold and silver coin, and later largely of paper currency. This United States money acted in one respect like an ordinary bank check — it performed one exchange operation and then died, so far as the Philippines were concerned. The paymaster having received it from the United States paid it to the soldiers; and the soldiers exchanged it at the exchange shops or banks for local currency. The banks could not pay it out in any considerable quantities in the course of business; they accordingly allowed it to accumulate for a time, and then sent it

back to America. A not uncommon occurrence during 1898 and 1899, the writer was informed on good authority, was for an army transport bringing millions of dollars of United States currency to Manila to pass a liner returning to the United States with a similar amount of the same kind of currency which the banks were sending back because they could not use it.

After September 26, 1899 considerable amounts of United States currency were obtained by the Government from the banks and merchants by the sale to them of drafts on the United States subtreasuries at par, thereby avoiding the necessity of bringing so much United States money to the Philippines.[1] It is difficult to see why this practice could not profitably have been resorted to earlier and more extensively. During the fiscal year 1900 there was disbursed in the payment of troops in the Philippines $14,640,000, of which $6,407,000 was received during the year in the form of shipments from the United States and $2,605,000 was obtained from Manila banks in exchange for funds placed to the credit of the Manila banks' agents in New York.[2]

The usual practice of the other departments of the Military Government, whether their functions were military or civil, was to use local currency. On June 3, 1899 General Otis wrote:

"With the exception of the disbursements of the pay department nearly all receipts and expenditures of money incident to the transaction of army business here are confined to the currency of the country. . . . All contracts, verbal or written, on which funds are disbursed and which affect labor, rentals, and supplies procured in the Philippine market are made and executed as regards the expenditure of money upon the prevailing currency basis, and

[1] Cf. Ann. Rep. U. S. Paymaster-General, 1900, in House Doc., 56th Congress, 2d Sess., III, pp. 931–32; also Edwards, pp. 6–8, 19, 31–32.

[2] An itemized statement will be found in House Doc., 56th Congress, 2d Sess., VI, p. 137.

amounts due are paid from the public civil funds at the prevailing market rates; hence this class of business is not affected in any wise by the varying rates of exchange." [1]

To the above rule, however, there were some exceptions in addition to the paymaster's department. They were: the pay of civilian clerks brought from the United States, the disbursements of the commissary department,[2] and domestic and foreign postal fees.[3] Later, arrangements were made for the acceptance of United States currency (in addition to local currency) in payment of custom duties, internal revenue taxes, and various public fees, at official valuations fixed from time to time in local currency.[4] This was not the case, however, during the early days of the Military Government,[5] and complaints were occasionally made that in the matter of tax payments the United States Government was discriminating against its own money.[6]

[1] Edwards, p. 6.

[2] Ibid., p. 12.

[3] Cf. General Order No. 38, U. S. Military Government in the Philippines, Aug. 22, 1899.

Local currency was also received at the post office, but at rates based upon the quarterly valuations of foreign coin issued by the U. S. Director of the Mint. Cf. Edwards, pp. 15, 28, and 29.

[4] Infra, pp. 272 and 279–80.

[5] Edwards. p. 15.

[6] The difficulties in making satisfactory adjustments in the case of operations and accounts involving the two currencies were partly met by General Order Number 65 issued under direction of the War Department, April 10, 1899. It provided that, The money accounts of disbursing officers of the United States army, "whether for purchases or services, will be stated in the currency under which the indebtedness is incurred, *i.e.*, foreign silver or gold, or United States currency.

"If the agreement calls for either foreign silver or gold the account shall be stated in those currencies, respectively. When in silver, the total amount will be reduced to its equivalent in the gold currency in use in the country in which the indebtedness is incurred at the rate of exchange which may govern at the time, and from this gold currency into United States currency at the current rate of exchange at the date of payment. . . .

"The amount in United States currency having been arrived at, authority is hereby given for checks to be drawn therefor by disbursing officers to their

Efforts of Government to Maintain a Two to One Ratio

To the student of monetary science some of the most suggestive features of the monetary history of the Philippines during the early years of the American occupation concern themselves with the relations existing between the Government and the banks, and more particularly with the efforts made to hold the local currency at a gold value of $0.50 to the peso or, as it was commonly expressed, at a rate of "2 to 1."

On August 19, 1898 the three commercial banks, namely, the Hongkong and Shanghai Banking Corporation, the Chartered Bank of India, Australia, and China, and the Spanish-Filipino Bank, by the managers of their Manila branches, wrote to Brigadier General F. V. Greene as follows:

"Owing to the large amount of American gold being offered us for exchange into Mexican currency, and further, the big sterling letters of credit advised us in favor of the paymasters and others which we understand will be required in Mexican dollars, as this is the only acceptable coin in use amongst the natives, and for general trading purposes, while we are anxious to give the soldiers and your Government every assistance by being in a position to quote an exchange of not worse than 2 Mexican for $1 gold, we

own orders in United States currency and by them exchanged at local fiscal agencies of the United States where possible, or at local banks, for the necessary amount in the coin required to pay the creditor in the money originally agreed upon, and authority is hereby given for such exchange where the creditor declines to accept check payable in currency of the United States.

"The vouchers for accounts will be made to show the debt as actually incurred, in the coin in which payment is made, and the reduction from this coin to United States currency, the rate of exchange being stated on the voucher, and the amounts stated on abstracts and account current in United States currency. . . ." Edwards, p. 20. Cf. infra, p. 288–90.

This order has been quoted at length because it represents the general policy followed until some time after the establishment of civil government in the islands — a policy, however, to which there appear to have been exceptions.

shall be quite unable to preserve this basis of exchange should there be any scarcity. In view of this, and in order to give every facility for the exchange of United States gold currency, we may require to import clean Mexican dollars, duty free, and shall be obliged if you can see your way to grant us the necessary authority. *And we agree to maintain a rate of exchange of not less than two Mexican dollars for one gold dollar to the extent of our import of Mexican dollars.*" [1]

Upon the same date General Greene replied: "Your proposition is approved by General Merritt, and you are authorized, until further notice, to import Mexican dollars free of duty *on the conditions therein stated.* [2]"

The action repealed the Spanish legislation of 1877 prohibiting the importation of Mexican pesos,[3] and from this time until January 14, 1904,[4] with the exception of a short period during the Boxer trouble in China,[5] there was a virtually free movement of Mexican pesos into and out of the Philippines. In other words the Philippines passed from a fiduciary coin standard to a silver standard, with the Mexican peso as the unit of value.

A glance at the chart on page 251 will show that for nearly two years after this arrangement, more precisely until July 1900, when the Boxer outbreak occurred in China, the price of silver and sterling exchange rates in Manila were exceptionally stable. During this period the extreme range of sterling exchange fluctuations was between a maximum of $24\frac{3}{8}d.$ (equivalent at par exchange between New York and London to \$0.494) and a minimum of $22\frac{1}{2}d.$ (equivalent to \$0.456)—a range of 7.7 per cent as compared with one of 25 per cent for the preceding 23

[1] Report of Taft Philippine Commission, 1900, p. 85. The italics are mine.

[2] Ibid, p. 86. Italics are mine.

[3] Cf. supra, pp. 247–48.

[4] Cf. infra, p. 335.

[5] Cf. infra, p. 269.

months and approximately 18 per cent for the succeeding 23 months.

Under the authority thus obtained the banks made heavy importations of Mexican pesos, and gave out local currency in exchange for United States currency or United States currency in exchange for local currency, at varying rates, always maintaining a substantial margin of profit between their buying rate and their selling rate, but at no time until the end of July 1900 giving less than two Mexican pesos for one dollar of United States currency. During that time the banks' buying rate for American dollars varied between a maximum of Pfs. 2.07 and a minimum of Pfs. 2.00, but during by far the greater part of the period it was below Pfs. 2.05.[1] The range of fluctuation, it will be seen, was less than half that of sterling exchange rates. In so far as United States currency circulated, it usually did so at the rate of 2 to 1.

The latter part of July 1900, there was a substantial rise in the London price of silver and in the silver exchanges, due chiefly to the demand for Mexican pesos for the payment of troops and the purchase of supplies incident to the military operations in connection with the Boxer troubles in China.[2] The agio above the equivalent of a 2 to 1 rate which the maximum sterling exchange rate in Manila of the period gave was very small, *i.e.*, less than $1\frac{1}{2}$ per cent, rep-

[1] A table of the bank rates for the period is given in the Report of the Taft Philippine Commission, 1900, p. 86.

[2] Sterling rates in Manila for four months paper rose from a maximum of 24*d.* for June to $24\frac{9}{16}$*d.* for July, $24\frac{15}{16}$*d.* for August, $25\frac{1}{8}$*d.* for September, and $25\frac{5}{16}$*d.* for October — the October rate being the highest. To convert these rates to a telegraphic transfer basis about $\frac{3}{8}$*d.* should be deducted from each one representing interest at the London market rate which at this time was in the neighborhood of 4 per cent on six months paper. This would make the maximum telegraphic transfer rates for these months respectively about as follows: June, $23\frac{5}{8}$*d.*; July, $24\frac{3}{16}$*d.*; August, $24\frac{9}{16}$*d.*; September, $24\frac{3}{4}$*d*; and October, $24\frac{15}{16}$*d.* On the basis of par exchange between New York and London a $24\frac{21}{32}$*d.* telegraphic rate in Manila is approximately equivalent to a $0.50 value to the Mexican dollar or a 2 to 1 rate.

resenting a United States currency rate of Pfs. 1.97 to $1. Under these circumstances there is little question that a 2 to 1 rate could easily have been maintained by the banks, with the coöperation of the Government — possibly with the aid of an export duty on Mexican pesos — had the banks made a reasonable effort to do so. But on July 31 the banks broke their agreement by quoting a buying rate for United States currency of Pfs. 1.98.[1] The effect of this reduction in the rate was

"immediately to create a discrimination against American money. Small traders took advantage of the situation and would accept [American] money only at the rate of [Pfs.] 1.50, 1.60, 1.70, or 1.75 for a dollar, resulting in very great loss to all who had to make payments of any kind in American money. The people reasoned that if American money could go down to [Pfs.] 1.98 it could go very much lower, and that there was no reason why it should not be upon a par with the Mexican dollar. There was much disturbance in business circles, and the conditions were highly unsatisfactory." [2]

At this juncture, the writer believes, the Government should have taken two positive measures: (1) It should have called the banks' attention to the agreement of August 19, 1898, by which, in consideration of the authority to import Mexican dollars free of duty, they had promised "to maintain a rate of exchange of not less than two Mexican dollars for one dollar gold to the extent of . . . [their]

[1] The Manila Times of August 6, 1900 said: "The banks in Manila are discounting United States currency at 2 per cent; the merchants are following the posted notices of the banking houses and exacting the acceptance by their American customers of the same rate. . . . The Chinese merchants as a class and almost to a unit refuse to accept American money except at the banks' rate of discount; few of the merchants on the Escolta [the principal business street of Manila] seem disposed to do it, yet there are a few who will continue, make or break, to receive it at the old rate. . . ."

[2] Rep. Taft Phil. Com. 1900, p. 87.

import of Mexican dollars," [1] and should have insisted that they make good their agreement. The Military Government had ample legal powers to do this, and in addition had an effective weapon in its control over government deposits in the banks. On August 18, 1900 it had on deposit in the Hongkong and Shanghai Banking Corporation, in round numbers, $118,000 and Pfs. 2,441,000; and in the Chartered Bank of India, Australia, and China, Pfs. 3,340,000. Had it threatened to withdraw these deposits, the banks would almost certainly have had a new light. Under the circumstances the banks' agreement appears to have been a very risky one, but they were experts in dealing in futures in the foreign exchanges, and having deliberately assumed the risk, and for nearly two years profited thereby, the Government should have insisted that they pay the price. (2) Inasmuch as the banks' burden in maintaining the 2 to 1 rate clearly would have been increased by the exportation of Mexican pesos on the part of Chinese exchange houses, and others not parties to the agreement of August 19, 1900, the Government might well have come to the assistance of the banks by prohibiting through an export tax or otherwise the exportation of Mexican pesos from the Islands. Such a prohibition, by preventing the quantity of currency from being reduced, would have held down exchange rates, as did a similar prohibition early in 1906 when a very much greater rise in the price of silver threatened to drive the newly introduced Philippine gold standard coins out of the country or into the melting pot.[2]

Instead of taking such positive measures, the Government temporized, much to the satisfaction and the profit of the banks.

On August 10, 1900 the two depositary banks proposed, as "the only remedy we can suggest," to keep the rate for the public at 2 to 1, a temporary measure according to which the banks were to purchase from the public such

[1] Supra, p. 268. [2] Infra, p. 354.

United States currency as was handed over the counter, at the rate of 2 to 1, crediting the United States currency so received to the Government's United States currency deposit account, and debiting the local currency paid out to the Government's local currency deposit account.[1] The burden of thus purchasing United States currency at a price above the natural market rate would thereby fall upon the Government and not upon the banks. Furthermore the banks would be enabled in this way to exchange at a high price their own United States currency holdings. On August 11 the Military Governor accepted the banks' proposition as "a temporary one and terminable at the will of the Government." [2]

The result of this arrangement is described by the Taft Philippine Commission in its Report of 1900[3]:

"[It] enabled the public at any time to obtain at the banks two Mexican dollars for a dollar of American money, so that the public were furnished with a stable currency, and American money was freely accepted in business transactions at the ratio stated, because it could at any time be transferred into Mexican money. . . . The practical working of this regulation has been to materially reduce the Government's . . . [large deposit of Mexican money],

[1] Rep. Taft Phil. Com., 1900, pp. 87–88.

[2] The acceptance was made public August 11, in the form of General Order No. 107 of the Military Governor. It provided:

"I. Until further orders United States currency tendered in payment of custom duties, internal revenue taxes, and other public dues collected by the Military Government in any of its branches, shall be received at the rate of two Mexican dollars for one dollar of United States currency, and will be invoiced to the Treasurer of Public Funds and receipted for by him at that rate.

"II. All civilian employees under the Military Government will be paid, at the election of the employee, in either United States currency or Mexican silver, and when payment is made in the latter it will be at the rate of two Mexican dollars for one United States dollar. . . ." Special Orders, General Orders, and Circulars, Office of United States Military Governor, Philippine Islands, 1900.

[3] Page 88.

and to increase its deposit of American money, in some weeks with startling rapidity. . . ."

Taking four dates approximately a month apart, we find that the complexion of the Government's deposit balances in the local banks changed as follows:[1]

August 18, 1900 . . .	$ 117,950	Pfs. 5,780,652
September 15, 1900 . .	811,608	5,165,094
October 17, 1900 . . .	1,850,951	4,723,544
November 17, 1900 . .	3,021,870	2,876,974

Computing United States currency on a 2 to 1 basis, it will be observed that whereas on August 18, 4 per cent of the deposits were United States currency and 96 per cent local currency, on November 17, 68 per cent were United States currency and 32 per cent local currency. Actually the transfers were greater than the decline in the local currency balances show, since the receipts from customs duties and internal revenue taxes were to a considerable extent in the form of checks payable in local currency, so that the supply of local currency was being constantly replenished. This fact is evidenced by the amount of the increase in the United States currency balances. The Government found consolation in the claim that in one sense the loss was "only apparent, not real," because "the treasury . . . received for its Mexican money as much as it cost, and for most of it more," since it was mainly taken into the treasury when the prevailing ratio was higher than 2 to 1.[2]

A measure of some importance taken about a week before the above-mentioned arrangement was made with the banks, and calculated to lessen the demand for the appreciating Mexican peso, was the issuance of an order of the Military Governor directing the collector of customs and the collector of internal revenue to receive United States currency in payment of taxes at the rate of 2 to 1.[3] To

[1] Semi-weekly figures are given in Rep. Taft Phil. Com. 1900, p. 88.
[2] Ibid., pp. 90–91. [3] Ibid., p. 87.

the same end government disbursements were made largely in the money of the United States.[1]

Proposal to Introduce the British Dollar into the Circulation. A second remedial measure suggested by the banks was the introduction into the Philippine circulation of the British dollar. This was a dollar of 416 grains of silver .900 fine, containing when new therefore two thirds of one per cent less pure silver than a new Mexican peso. It had been coined at Bombay since 1895-96, with the idea of providing a distinctively British silver standard coin to displace the Mexican peso in the Orient, particularly in the Straits Settlements and China. The argument for its introduction into the Philippines was that it was an equally good coin with the Mexican peso, and, not being in such great demand at the time of the Boxer troubles, was obtainable at a lower price. The Philippine authorities very wisely rejected this proposal, later citing the following reason:

"The so-called British dollar at the time could have been imported into Manila on the basis of about [Pfs.] 2.01 or [Pfs.] 2.02 for $1 American gold, but its bullion value as compared with the Mexican is very difficult to ascertain with clearness,[2] and the apparent effect of its introduction would have been to enable the local banks to have placed it in their vaults in lieu of the Mexican currency which the Government had there deposited to the amount of upwards of [Pfs.] 4,000,000, and to export to China the Mexican currency belonging to the Government, and thereby secure a very large profit to themselves by the substitution. Meanwhile, an additional element of uncertainty would have been introduced into the money of the Islands, and the certainty of continued stability of ratio between the

[1] Rep. Phil. Com., 1901, Part I, p. 95.

[2] This assertion cannot be substantiated. It was just as easy to know the bullion value of one as of the other. Both dollars were "honest" full weight dollars when new, and their weights and finenesses were matters of law.

different currencies under such circumstances would have been far from clear." [1]

A 10 Per Cent Export Tax on Mexican Pesos. After the Government's local currency deposits in the banks had been reduced by about Pfs. 2,000,000 and something like 5,000,000 Mexican pesos had been exported from the Islands, the Government, *i.e.*, the United States Philippine Commission, which had taken over the civil government of the Islands from the military authorities September 1, 1900, passed a law, November 12,[2] imposing a tax of 10 per cent upon the exportation of Mexican pesos. The tax was prohibitive and was meant to be.[3]

Other Friction Between Government and Banks. The friction between the Military Government and the banks, over the question of the maintenance of the 2 to 1 rate in accordance with the agreement of August 19, 1898, was but part of a general situation characterized by considerable animosity between the Government and the banks arising from a controversy over the unwillingness of the banks to accept from the public United States currency deposits. An account of that controversy is given in Appendix A (pp. 383–85).

Decline in Price of Silver. With the suppression of the Boxer trouble in China by the allied powers, the gold price of silver and of Mexican pesos fell. The decline which set in with the opening of the year 1901 continued almost without interruption until the spring of 1903, as will be seen by reference to the chart on page 251. It seemed that the forces controlling the silver market were determined to give the Philippine authorities a varied and comprehensive experi-

[1] Rep. Taft Phil. Com., 1900, p. 87.

[2] For text of this Act, see ibid., p. 305.

[3] In the three days that elapsed between the publication of the proposed legislation placing a tax upon the export of Mexican pesos and its enactment Pfs. 1,133,500 Mexican currency was exported, of which Pfs. 650,000 was by two of the banks which undertook the agreement of August 19, 1898. Ibid., pp. 89–90.

ence with the difficulties of a dual monetary standard. There were two years of a remarkably stable silver market (from the summer of 1898 to the summer of 1900), then a half year of a rapidly rising market, followed by two years of a rapidly falling market. We have discussed the monetary experiences of the first two periods, and now come to those of the third, out of which developed the agitation in favor of putting the Philippines upon a gold standard.

CHAPTER III

DIFFICULTIES WITH A DEPRECIATING SILVER STANDARD

WE may now consider the experiences of the Civil Government with a fluctuating and depreciating standard of value for the period from January 1901 to the spring of 1903.

Quasi Bimetallism

The extent of the fluctuations in the gold value of the peso is shown by the chart on page 251. The average monthly telegraphic transfer rate on London declined 7.1 per cent from January to December 1901. From January 1902 the rate declined almost uninterruptedly until it reached $18\frac{23}{32}$ *d.* for February 1903, the lowest average monthly rate that ever existed in the Philippines, representing a decline in fourteen months of 23.2 per cent. Throughout the year 1901, after January, the value of the Mexican peso, as measured by sterling exchange rates, was at all times substantially above its bullion value measured by the London prompt price of silver; but this was not true during the year 1902 nor during the first two months of 1903, when the two values fluctuated very closely together. The reason for this change will be found largely in the discontinuance after the beginning of 1902 of the Government's efforts to sustain artificially the 2 to 1 rate. After the opening of the year 1901 the decline of silver was so pronounced that it was no longer necessary to continue the 10 per cent export tax on Mexican pesos in order to prevent the Manila price of a United States dollar from falling below two pesos. From that

time forward the danger was in the other direction, *i.e.*, that the rate would go above 2 to 1. By continuing this restriction upon the exportation of Mexican pesos, and thereby keeping the supply artificially high, the Government held down the gold value of the local dollar and made its task of maintaining a 2 to 1 rate more difficult. Rather tardily it repealed the tax August 31, 1901. From that date until January 14, 1904 there were no legal restrictions on the flow of Mexican pesos to or from the Philippines.

Until the end of the year 1901 the Government accomplished the increasingly difficult task of maintaining the two currencies in general circulation at a rate of 2 to 1. It did so by declaring this rate its official rate, and by continually pumping into the circulation, through the payment of government obligations, large quantities of the under-valued United States currency, and by receiving in payments to itself large and increasing proportions of local currency which it placed on deposit in the local banks.[1] In this way, and by using its heavy balances at the banks for the maintenance of the 2 to 1 rate, the Government maintained a quasi bimetallism at a 32½ to 1 ratio. This is the nearest approach to bimetallism known to the writer anywhere in the world since the great movement for the demonetization of silver in the early seventies of the last century.[2] It is a curious episode in that this bimetallism was unconsciously established by a Republican administration which obtained office as the result of a campaign in which it stood as the archenemy of national bimetallism.

[1] On February 2, 1901 the Government's balances in the Manila banks were: $2,686,929 and Pfs. 2,107,324; on October 9 they were: $2,388,687 and Pfs. 9,594,125. Rep. Phil. Com., Dec. 1901, pp. 96 and 97.

[2] There were free coinage of gold in the United States, free coinage of Mexican pesos in Mexico (although with certain brassage charges and taxes), and an unrestricted flow of both kinds of money into and out of the Philippines. The Mexican peso was unlimited legal tender, and although United States currency was not legal tender, it was receivable for all government dues and legally current in the Islands.

Concerning the success of the plan the Philippine Commission said in its report of October 15, 1901:[1]

"The effect of the military order . . . authorizing the exchange of 2 pesos of local currency for $1 of money of the United States, coupled with the legislation . . . to secure equal facilities for the deposit and payment of both currencies in the local banks, and the payment of sums due from the Insular Government to employees and others mainly in money of the United States, has been to secure an entirely stable currency throughout the Islands since the 11th day of August, 1900, down to the date of this report, and it is considered that the securing of this result has been a very great advantage to all the people of the Islands."

By the end of the year 1901 silver had reached such a low point that the burden of maintaining the 2 to 1 rate was more than the Government could carry, and on January 1, 1902, the official rate was raised from 2 to 1 to 2.10 to 1, the first departure from the 2 to 1 basis which was originally established in August 1898.[2]

Official Exchange Rates in Philippines. We may now summarize briefly the action of the Government in the matter of official rates from August 1900 to the introduction of the money of the new gold-exchange standard the latter part of July 1903. In declaring its official rates, the Civil Government was prevented from changing them oftener than once a quarter, at first by orders from the Secretary of War, and subsequently down to July 1, 1902 by law.[3] Because of the great instability of the price of silver this quarterly period proved to be too long, and often led to fiscal difficulties. Accordingly an Act of Congress of July 1, 1902 (section 84) authorized the Civil Governor in his discretion to fix "the equivalent rates of the money in circulation . . . with the money of the United

[1] Page 98.

[2] Cf. supra, pp. 267–68.

[3] Section 8 of an Act of the Philippine Commission of Sept. 17, 1901, later affirmed by Act of Congress of March 8, 1902.

States as often as once in ten days." Even this ten-day limitation at times proved embarrassing. The following table gives the official rates to the end of the year 1903:

Official Rate Pfs. to $1	U. S. Currency Equivalent $ to Pfs. 1.	Period Covered	Date of Order Establishing Rate
2.00	0.50	Aug. 11, 1900, to June 30, 1901	Aug. 11, 1900
2.00	0.50	July 1, 1901, to Sept. 30, 1901	July 1, 1901
2.00	0.50	Oct. 1, 1901, to Dec. 31, 1901	Sept. 25, 1901
2.10	0.449	Jan. 1, 1902, to Mar. 31, 1902	Dec. 26, 1901
2.27	0.441	Apr. 1, 1902, to June 30, 1902	Mar. 27, 1902
2.35	0.426	July 7,[1] 1902, to Sept. 22, 1902	July 7, 1902
2.40	0.417	Sept. 23, 1902, to Oct. 21, 1902	Sept. 23, 1902
2.46	0.407	Oct. 22, 1902, to Nov. 10, 1902	Oct. 22, 1902
2.50	0.40	Nov. 11, 1902, to Nov. 22, 1902	Nov. 11, 1902
2.60	0.385	Nov. 23, 1902, to Jan. 24, 1903	Nov. 23, 1902
2.66	0.376	Jan. 25, 1903, to Mar. 10, 1903	Jan. 25, 1903
2.60	0.385	Mar. 11, 1903, to Apr. 2, 1903	Mar. 11, 1903
2.55	0.392	Apr. 3, 1903, to Apr. 30, 1903	Apr. 3, 1903
2.50	0.40	May 1, 1903, to May 13, 1903	May 1, 1903
2.45	0.408	May 14, 1903, to July 17, 1903	May 14, 1903
2.38	0.420	July 18, 1903, to July 31, 1903	July 18, 1903
2.30 and 1.15 for new peso	0.435	Aug. 1, 1903, to Dec. 31, 1903	July 31, 1903, and Proclamation of Oct. 23, 1903

[1] There is a hiatus of six days here. Subsequent orders were issued for "at least ten days and until further order."

Many of these changes, it will be observed, were very pronounced. From December 31, 1901 to October 22, 1902, a period of less than ten months, the gold value of the Mexican peso, as measured by the Government's official rates, fell 18.7 per cent; and for the ten months ending October 1902 the average monthly value as measured by sterling exchange rates (cable transfers) fell 11.4 per cent. Taking the dates of the extreme rates we find a variation in the official rate from Pfs. 2.00 to $1 for the quarter ending December 31, 1901 to Pfs. 2.66 to $1 for the one and a half month period beginning January 25, 1903, representing a decline in the gold value of the peso of 24.8 per cent during a period of less than thirteen months. During practically the same period, January 1902 to January 1903, inclusive, the average monthly value of the peso as expressed in sterling exchange rates fell 16.9 per cent. The range of fluctuation ran as high as 8.2 per cent in a month (*i.e.*, for November 1902). When one notes that during the same period of thirteen months the range between the highest and lowest rates for bankers' sight bills in New York on London was less than 0.6 per cent, the extent of these Philippine exchange fluctuations will be better appreciated. Out of the resulting disturbances in the fiscal affairs of the Government, in the financing of foreign trade, and in the individual finances of Americans in the army, the civil government, and private business in the Philippines, grew an agitation for the adoption of the gold standard.

The Silver Standard and the Government's Finances

The chief factor in the movement for currency reform was the interference of the silver standard with the Government's finances. This interference occurred chiefly in two ways: (1) Financial losses and uncertainties in the budget. (2) Accounting difficulties.

Financial Losses and Uncertainties in the Budget. Since the business of the country was conducted almost entirely with local currency, the Government's revenues were naturally received largely in that currency. Its expenditures, on the other hand, were largely upon a United States currency basis, *i.e.*, either in United States currency, or in local currency at the official rate for United States currency, the currency in which the obligation was expressed. Officials and clerks brought from the United States had their salaries fixed in terms of United States currency—in America they would not have understood Philippine local currency. Furthermore the Government purchased many supplies in the United States. Obviously, when silver was depreciating throughout the year 1902 and the fore part of 1903 the number of pesos the Government was compelled to pay for each $100 of United States currency obligations rose from 200 to 210, 227, 235, and so on to the maximum of 266.

Meanwhile, however, there was no corresponding increase in the Government's revenues. Even under ordinary circumstances these revenues would have been received largely in local currency; but conditions at this time artificially discriminated against United States currency, so that a larger proportion of the revenue than normally was paid in local currency. The discrimination consisted in the fact that silver was continually falling and that the official rate for United States currency therefore lagged behind the market rate. For example, when the Government was receiving United States currency in payment for customs duties at, say, 2.10, the banks might be paying for United States currency Pfs. 2.15 or Pfs. 2.20. Naturally the holder of United States currency took it to the banks and exchanged it for local currency, and then paid his customs duties in the local currency. It was a simple case of the working of Gresham's law. The Government was paid in the money which it overvalued.

These advances in the official rate required the writing off of substantial gold values in the treasury balance. For example, on January 1, 1902, when the official rate was raised from Pfs. 2.00 to Pfs. 2.10, the Treasurer had in his hands Pfs. 9,937,720.53. At the former rate this was worth $4,968,860.26, while at the latter it was worth but $4,732,247.87, representing a loss of $236,612. The corresponding loss due to the change in the official rate from Pfs. 2.10 to Pfs. 2.27 on April 1 was $393,112.[1] Furthermore, quoting from the report of the Auditor for the fiscal year 1902, "The accounts of all disbursing officers having been expressed in United States currency, in anticipation of the adoption of gold as the standard of value, it likewise became necessary to credit these officers in their accounts with the difference in gold value between the local currency in their hands at the old ratio and at the new."[2] Basing its conclusion upon the Auditor's reports, the Philippine Commission estimated the loss arising in these ways from January 1, 1902 to October 25, 1902 at approximately $957,000.[3] Inasmuch as there was no corresponding rise in local currency prices in the Philippines during this period of rapid decline in the gold value of the peso, the above loss was obviously a book loss approximately to the extent that the Government bought supplies and paid wages on a local currency basis; it was a real loss to the Government, however, to the extent to which its expenditures were made upon a gold basis. Unfortunately the published records do not afford the data necessary to differentiate the amount of the book loss from that of the real loss.

Although there was a very large real loss to the Government, it was not like sinking the money in the ocean, as the Commission claimed,[4] for to a large extent the Gov-

[1] As a slight offset to these two losses there was a gain on exchange of about $37,000. Rep. Phil. Com., 1902, Part II, p. 762.

[2] Ibid., p. 763. [3] Ibid., p. 701. [4] Ibid., p. 701.

ernment's loss was the government employees' gain. A clerk, for example, whose salary was $100 a month received for it Pfs. 200 when the official rate was 2 to 1, and he received Pfs. 266 for it when the rate was 2.66 to 1. The prices of the local products that he bought, his rent, wages of servants, etc., did not advance much during 1902 in terms of local currency.[1] In 1903 and 1904 the writer heard many Americans in the employment of the Philippine Government talk of the "good old times when one got 2.66 Mexican for a dollar gold and Mexican went further than it does now." Unfortunately there exist no price index numbers for the Philippines by which the extent of the upward movement of prices at this time can be judged. Government employees at the time they were receiving these high local currency rates for their gold wages failed fully to appreciate them, because the official rate at which their wages were converted was usually lower than the market rate — since, as previously noted, the official rates being fixed for considerable periods of time lagged behind the market rates, which might fluctuate daily.[2] Later, however, when the official rate began to decline, as the price of silver advanced, the complaints of government employees became louder and more frequent.

Since the Government suffered financially during the year 1902 and the fore part of 1903, when the gold value

[1] Of course when the rate was 2.66 the purchasing power of the peso over goods imported from gold standard countries was considerably lower than when the rate was 2.00.

[2] In his 1902 Report the Auditor for the Philippine Islands said: "Salaries of officers, clerks, and employees in the insular service were necessarily paid in local currency at the ratio at which the money was appropriated. This resulted in loss to the recipients of this currency, which was not equal in commercial value to the United States currency represented by the obligation. This was more especially true in Manila than in some of the provinces, where local currency continued to circulate in small amounts at even the old rate of two to one. . . . Many complaints, both written and oral, were made to the Auditor, but as the accounts were settled according to law, this office was without further jurisdiction in the matter." Ibid., p. 764.

of silver was depreciating, it would be expected that the Government would have profited during the greater part of 1903, when silver was appreciating in terms of gold and the Government's official rate was being reduced from 2.66 to 2.30. "It is a poor rule that doesn't work both ways." By that criterion this was a poor rule, for the Government appears not to have gained but actually to have lost by the rise in the gold value of the peso. In the language of Wall Street the Government found itself again on the wrong side of the market. How it happened will be seen from the following facts gleaned from the annual report of the Philippine Auditor for 1903:[1]

The Government's cash balances in United States currency and in local currency, at the beginning of each month of the fiscal year, and the Government's monthly customs receipts — by far the largest item of revenue — in round numbers, were as follows:[2]

Date	Cash Balance		Deposits on Account of Customs Revenues	
	$	Pfs.	$	Pfs.
	000	000	000	000
July, 1902	1,257	10,756	229	1,202
Aug., 1902	1,516	10,475	385	453
Sept., 1902	2,190	10,384	405	1,056
Oct., 1902	2,591	10,224	297	1,559
Nov., 1902	2,979	11,450	278	1,195
Dec., 1902	2,940	9,555	288	1,207
Jan., 1903	3,265	7,895	562	723
Feb., 1903	3,792	6,683	479	538
Mar., 1903	4,320	6,409	642	296
Apr., 1903	4,621	3,792	621	390
May, 1903	6,074	2,430	658	215
June, 1903	8,726	1,009	584	351

The Treasurer's cash balance at the end of the fiscal year 1903 consisted of $10,853,803 in United States

[1] Ibid., 1903, III, pp. 391 ff.

[2] Ibid., pp. 399–405.

currency, with an overdraft in Mexican currency of Pfs. 539,269, which had been temporarily met by the Treasurer from other funds in his hands.[1]

Three striking facts stand out in the above figures: (1) The Government had a large local currency balance down to November 1902, in which month it reached a maximum of approximately eleven and a half million pesos. Beginning with December this local currency balance dwindled until it amounted to only about a million pesos on June 1, 1903, and became an overdraft of over a half million pesos by June 30. (2) Throughout the fiscal year ending June 30, 1903 there was an increase every month, except December, in the Government's United States currency balance, rising from \$1,257,000 for July 1, 1902 to \$10,854,000 for June 30, 1903, but this increase took place chiefly during the period January 1, 1903 to June 30, 1903, during which the increase amounted to approximately \$7,600,000. (3) With the exception of the month of August 1902 the customs receipts for every month through December 1902 were chiefly in local currency; after December for every month they were chiefly in United States currency, the proportion paid in this currency showing a tendency to increase.

A glance at the chart on page 251 will show that the gold value of the local peso reached its low points in December 1902 and January 1903. The lowest telegraphic transfer rate ever reached in Manila was the $18\frac{7}{16}d.$ rate reached in December 1902. A reference to the table of official rates[2] will show that the most unfavorable rates to local currency ever declared were the three covering the period November 23, 1902 to April 2, 1903. But these were the rates at which the Government disposed of the great bulk of its local currency balance — a balance obtained mostly at rates representing a much higher gold value.

[1] Rep. Phil. Com., 1903, III, p. 391. [2] Supra, p. 280.

When the gold value of the local peso was falling, we found that the official rate lagged behind the market rate, representing a continual overvaluation of local currency in terms of United States currency, and leading to the payment of government taxes and dues chiefly in local currency. Now during the period of the rise in the gold value of the local peso, the official rate likewise lagged behind the market rate, with the result that local currency was continually undervalued by the Government and taxes were paid chiefly in United States currency — another illustration of Gresham's law.

According to the Auditor of the Philippine Islands the policy of depleting the Government's local currency balance was a deliberate one.[1] He said:

"The Treasurer's cash balance at the beginning of the fiscal year, three fourths in Mexican currency, had shifted to a balance wholly in United States currency at its close. This was the result of a policy deliberately adopted of undervaluing the Mexican currency to such a degree in fixing the official ratio that it was not offered to any considerable extent in payment of public dues, United States currency being paid in preference. On the other hand, almost all the insular appropriations, except those for the purchase of bullion, were withdrawn and disbursed in Mexican currency, in accordance with the provisions of the appropriation acts. This policy of taking in the stable currency and paying out the unstable currency paved the way to the adoption of the gold standard at the close of the fiscal year. The Government, in protecting its revenue collections against the unstable currency by undervaluing it, was compelled, however, to pay its obligations in the same undervalued medium. This caused a loss to the Government fully as great as that which found expression in the accounts of the previous fiscal year" — a loss for the fiscal year estimated by the Secretary of Finance and Justice at approximately $659,000.[2]

[1] Ann. Rep. Phil. Com., 1903, III, p. 391.

[2] Ibid., p. 281.

Just how this policy of paying out millions of pesos of local currency at rates representing a loss to the Government and intentionally fixed below the current market value paved the way for the adoption of the gold standard is difficult to see.[1] If the old currency was to be withdrawn from circulation upon the introduction of the new gold standard currency, it would seem more natural for the Government to pave the way by overvaluing the old currency so as to accumulate as much as possible either for recoinage or for exportation. This the Government later did. Furthermore it would presumably be much easier to substitute the proposed new gold standard coin (representing 50 cents of American money) for United States currency in circulation than for local currency. This fact, obvious in the light of Gresham's law, was abundantly proved by subsequent experience.[2] A continual small overvaluation of local currency at this time, when the gold price of silver was rising, the writer believes, would have expedited the subsequent currency reform, *i.e.*, the transition to the gold standard, and incidentally would have proved fiscally profitable to the Government, offsetting in a degree the exchange losses incurred by the Government during 1902 when the price of silver was falling.

Accounting Difficulties. The second governmental difficulty with the dual standard was that of accounting, which had caused so much trouble during the period of the Military Government. The civil authorities had made vigorous efforts to cope with this problem and had accomplished something. That they were still, however, far from a satisfactory solution of it is evidenced by the Auditor's official reports. The two most serious difficulties, confusion and temptation to fraud, may best be described

[1] It may have encouraged somewhat the commercial exportation of that part of the local currency consisting of Mexican pesos.

[2] Cf. infra, pp. 327–32.

in the language of the Auditor and of the Secretary of Finance and Justice. As to the former difficulty the Auditor said in his annual report for 1902:

"At one time disbursing officers were handling two kinds of currency involving, in effect, five standards of value. They were expending appropriations disbursable in United States currency; appropriations disbursable in local currency at the ratio of two to one; half and half appropriations, or appropriations disbursable one half in United States currency and one half in local currency at the ratio of two to one; local currency appropriations disbursable at [Pfs.] 2.10 to $1; and appropriations disbursable in local currency at [Pfs.] 2.27 to $1. The difficulties arising under such a complicated system were almost insuperable, especially as all accounts were required to be stated to the War Department expressed in United States currency. The debit and credit differences to be adjusted were so numerous as greatly to impede the progress of the accounting work."[1]

In this connection it should be added that it took considerable time to communicate changes in the official rate to places distant from Manila, often several weeks for the remoter parts of the Islands. There were towns in the Philippines as far distant from Manila as New York City if the distance be measured by the time required for a letter to reach them. The result was that in these remote places receiving and disbursing officers operated on a false basis for a considerable time, and met with much trouble in settling their accounts with the Auditor. This was particularly true when frequent changes in the official rate were made.

As to the temptation to fraud, which all too often in the Philippines proved too strong for men who had proven excellent volunteer soldiers and who were later appointed to responsible financial positions under the Civil Govern-

[1] Phil. Com. Rep., 1902, II, pp. 763-64.

ment,[1] the Secretary of Finance and Justice said in his 1903 annual report:

"There is a great opportunity on the part of all receiving and disbursing officers for fraud of such a character as to be almost impossible to discover. At nearly all times it is more profitable to pay in one currency . . . than in the other, because a receiving officer who receives payment in United States money, when that money is more valuable than local currency at the official ratio, can sell the money of the United States and receive local currency in exchange therefore at the commercial rate, and pocket the difference between the commercial ratio and the official ratio, making the entries upon his books to appear that he received payments in local currency; and the same thing applies to all disbursing officers. If, on the other hand, it is more profitable to make payment in gold, local currency can be readily exchanged with money changers for gold, or for money of the United States, the difference in that event being provided for by the receiving or disbursing officer making entries to correspond with the financial transactions instead of the actual receipt of disbursement."[2]

So much for the Government's difficulties with the dual standard; and it may be said that these difficulties more than those of merchants and bankers which we shall now consider gave rise to the demand for a gold standard.

Difficulties in Connection with Foreign Trade

The difficulties experienced by merchants centered chiefly in foreign trade, by far the larger part of which, both export and import, was with gold standard countries. Exchange with silver standard countries like China and the Straits Settlements was fairly constant, varying only between the "silver points." The following brief summary[3]

[1] Cf. Phil. Com. Rep., 1903, III, pp. 393–97. [2] Ibid., pp. 701–02.

[3] Figures were compiled from The Commerical Philippines in 1906. Published by the U. S. Department of Commerce and Labor, Jan. 1907, pp. 33 and 34.

for the years 1900 to 1903 inclusive will give a picture of the situation. The figures are in millions of dollars.

EXPORTS

YEAR	1 United States	2 United Kingdom	3 Certain Other European Countries[1]	4 Hongkong and China	5 Other Countries	6 Total
1900	$ 2.96	$ 8.10	$4.23	$4.11	$3.59	$22.99
1901	4.55	11.13	2.67	3.04	3.12	24.50
1902	11.48	8.02	3.16	3.68	2.34	28.67
1903	13.07	9.46	4.26	2.29	3.30	32.40

IMPORTS

YEAR	1 United States	2 United Kingdom	3 Certain Other European Countries[2]	4 Hong-kong and China	5 British East Indies	6 French East Indies	7 Other Countries	8 Total
1900	$2.15	$5.58	$4.60	$7.74	$1.74	$0.76	$2.29	$24.86
1901	3.53	5.69	6.05	5.05	3.38	2.36	4.09	30.16
1902	4.15	5.64	6.38	6.47	1.67	5.57	3.45	33.34
1903	3.84	4.62	5.10	5.14	2.72	8.17	4.23	33.81

All the exports referred to in the above table were to gold standard countries except those to Hongkong and China (column 4) and a small part of those to "other countries" (column 5).[3] It is a fair conclusion that not

[1] These countries in the order of their importance for the export trade were France, Spain, Germany.

[2] These countries in the order of their importance for the import trade were Spain, Germany, France.

[3] The exports to the Straits Settlements are included in column 5. Their amount normally ran in the neighborhood of $600,000 to $800,000 annually. The silver standard countries of Siam, French Indo China, and Mexico were

over one seventh of the Philippine export trade at the time could properly be assigned to silver standard countries, and that the proportion was declining.

When we turn to the import trade we find that the silver standard countries were playing a much more important rôle. The imports from silver standard countries came mostly from Hongkong and China and from the French East Indies. Those from the French East Indies (column 6) represented chiefly rice imported from Saigon, the Philippine rice crops during the years 1902 to 1905 having been particularly bad. Imports from silver standard countries represented something like a third to two fifths of the total imports, and the proportion seemed to be increasing. As an argument for the continuance of the silver standard, however, these figures were weakened by the facts that the heavy rice importations from Saigon were looked upon as merely temporary, and that French Indo China itself was soon to give up the silver standard for the gold standard.

Clearly the logic of the foreign trade situation strongly favored the gold standard for the Philippines. In saying this, however, it is not intended to subscribe to the extravagant ideas of the evils to foreign trade of "an unstable and fluctuating dollar" which were so widely entertained at the time by Americans in the Philippines and of which the Government reports contained so many examples.

Exchange Fluctuations and Foreign Trade. The character of the evil as it was popularly understood and the evil as it actually existed may be shown by a few hypothetical illustrations reducing the problem to its simplest terms.

Let us suppose that on January 1 a hemp dealer in the Philippines contracts to deliver a given quantity of hemp in New York by the fore part of April, at a total price of

also included among "other countries." To these silver standard countries, all three of which were soon to adopt the gold standard, the Philippine exports were very small.

$10,000 payable in New York City. Suppose that the hemp dealer arranges to draw upon the consignee a demand bill for $10,000,[1] to be forwarded so as to arrive in New York at about the time of the arrival of the hemp. Suppose also that at the time these arrangements are being made, the Manila banks' buying price for such demand bills is 40, *i.e.*, they will give Pfs. 1.00 for each $0.40 of the bill. At this rate the exporter would receive for his hemp bill Pfs. 25,000. Assume that he knows at about what price he can buy the hemp in the Philippines and that he calculates that he can buy it and deliver it in New York at a total cost of Pfs. 23,000. This would leave him a net profit of Pfs. 2000. Accordingly he buys the hemp, as planned, during January and February, obtaining the funds by means of an overdraft on his Manila bank secured by a pledge of the hemp as purchased. He ships it the first of March, drawing at the same time a sight bill on the consignee for $10,000 and offers to sell this bill to his Manila bank. Meanwhile, however, let us assume the price of silver has risen and with it New York exchange, so that the rate for such demand bills is now 45 instead of the 40 upon which the merchant had based his calculations. Being compelled to sell at 45, *i.e.*, to take a peso for each 45 cents of United States money coming to him instead of for each 40 cents, he obtains for his bill of $10,000 only Pfs. 22,222 instead of Pfs. 25,000. Thus his estimated profit of Pfs. 2000 is changed into a loss of Pfs. 778, and this, despite the fact that he bought the hemp at the calculated price and had definitely contracted for its sale before its purchase.

If in the interim exchange had fallen to 35 instead of rising to 45, he would have received Pfs. 28,575 for his $10,000 bill and his profit would have been increased from

[1] In practice such a transaction would usually have been financed through a sterling letter of credit opened in London by the consignee through his New York bank.

Pfs. 2000 to Pfs. 5575. The hemp exporter would thus gain by a fall in exchange and lose by a rise; but he would run a great risk, and such risk-taking as this is not his business.

Let us take a similar hypothetical illustration from the side of the importer. A Manila wholesale shoe merchant buys by cable order, on January 1st, 5000 pairs of shoes in America at $2.00 a pair, when exchange is at 40. The shoes are to be delivered in Manila in 60 days, and the merchant is to pay for them by cable in New York funds 30 days after their delivery. The local market for shoes of this kind, let us assume, is such that the merchant can sell them at Pfs. 6.00 a pair, which would yield him a gross profit of a peso per pair or a total of Pfs. 5000. Allowing Pfs. 2000 for expenses, he would have a net profit on the transaction of Pfs. 3000 (which would be equivalent with exchange at 40 to $1200). He closes his contracts on both sides, that is, he buys the 5000 pairs of shoes at $2.00 a pair and agrees to deliver them to Philippine retailers at Pfs. 6.00 a pair. But during the next three months, let us assume, there is a substantial drop in the price of silver and with it of New York exchange, the price of cables falling from 40 to 35. The merchant has realized Pfs. 30,000 for the shoes, and he now goes to his Manila bank to purchase his cable transfer on New York in favor of the shoe manufacturer for $10,000. At an exchange rate of 35, however, this sum costs him Pfs. 28,575 instead of the Pfs. 25,000 which he had counted upon in figuring exchange at the earlier rate of 40. When he adds to this the Pfs. 2000 for expenses he finds that his anticipated net profit of Pfs. 3000 has been transformed into an actual net loss of Pfs. 575.

Even had he not contracted in advance for the sale of the shoes in Manila for Pfs 6.00 a pair he would probably have suffered, because the mere fact of a drop in exchange does not make it possible to sell the shoes at a higher price.

The local currency wages and incomes of most persons who buy shoes have not been appreciably affected by this sudden drop in exchange, nor is their demand for shoes thereby increased. In the course of time such a decline in exchange, if it were permanent, would influence the supply of shoes on the market through lessening their importation and thereby tend to raise the local currency price. But at best this influence works slowly — often too slowly to be of much benefit to the merchant who has already imported a large stock — for of imported goods like shoes there is usually a considerable supply on hand. Then, too, there is often the alternative of importing from silver standard countries with which exchange has remained practically constant. One must not assume, as Americans thinking in terms of United States currency so commonly did, that the price of shoes would rise promptly and just in proportion to the fall in exchange. The responsiveness of prices, even of goods imported from gold standard countries, was usually slow and incomplete. Retail and wholesale prices cannot fluctuate with daily or even weekly or monthly movements of exchange — and that is particularly true in an oriental and tropical country like the Philippines where inertia and custom play such important rôles.

If in the above illustration exchange had risen to 45 instead of falling to 35, the importer would have been able to buy his $10,000 cable transfer to New York for only Pfs. 22,222, thereby raising his anticipated net profit from Pfs. 3000 to Pfs. 5278 — an increase in the net profit as measured in United States currency from an anticipated $1200 to an actual $2375.

Obviously the rise in exchange which was so harmful to the exporter was *pro tanto* favorable to the importer; while the fall in exchange which was so favorable to the exporter was *pro tanto* harmful to the importer. A falling exchange stimulated exportation and inhibited importation; a rising exchange stimulated importation and in-

hibited exportation. Either called for an adjustment in currency shipments, and either tended toward a one-sided and artificial stimulus to trade which was not in the interest of healthy trade development.[1]

Forward Exchange Contracts. The above illustrations, although representing a common interpretation of the handicaps under which Philippine foreign trade was conducted during the period of the silver standard, greatly exaggerate those handicaps. As a matter of fact the exporter of hemp, unless he deliberately planned to speculate in exchange, would have gone to his bank at about the time that he contracted with the New York merchant for the sale of his hemp and would have made a contract for the forward sale of his hemp bill at a definite price. He would have agreed in January to sell his hemp to the New York merchant at so many dollars per bale, and at the same time would have agreed with his Manila bank to sell the dollars he was to receive in New York, *i.e.*, his New York bill of exchange, at a definite price in local currency, say, at a rate of a peso for each $0.41. Then, no matter what happened to exchange, he would have been safe. If exchange rose to 45, he would not have suffered — that would have been the bank's affair, not his. If it fell to 35, he would not have profited. He is not a speculator in silver, but a dealer in hemp, and he would have shifted this speculative risk to the shoulders of those whose business it is to handle such risks. A similar policy would have been followed by the importer of shoes. When in January he made his contract to buy the shoes in New

[1] Cf. The Influence of Falling Exchange upon the Returns Received for National Products. Argument submitted to the Monetary Commission of the Republic of Mexico, April 18, 1903, by Charles A. Conant, Jeremiah W. Jenks, and Edward Brush. Printed in Report of Commission on International Exchange, 1903, pp. 431–39. Cf. also Jeremiah W. Jenks, Currency Problems in the Orient. Papers and Proceedings of the Fifteenth Annual Meeting of the American Economic Association, December 1902, pp. 272–76.

York for $10,000 he would have made a forward contract with the bank for the purchase of these $10,000 to be laid down in New York, say 90 days hence, when payment for the shoes should fall due, at the exchange rate of 39, let us say. If in the interim exchange fell to 35, he would not thereby have lost, and if it rose to 45, he would not have gained. The price at which he was to buy his New York dollars would have been fixed, and the risk of loss or chance of profit arising from exchange fluctuations would have been shifted to the bank.

The bank itself, however, in making these two forward contracts, one for the delivery by the bank three months hence of a cable transfer of $10,000 to New York, and one for the delivery to the bank in Manila of a demand bill which would be paid in New York three months hence, would also have avoided the risk arising from exchange fluctuations. It would have hedged. The $10,000 bought from the exporter at the rate of a peso for each 41 cents it would have sold to the importer at the rate of 39 cents for each peso. The profit to the bank would have consisted in the difference between the buying rate and the selling rate — here for simplicity of illustration assumed to be much larger than would normally have been the case.

It should be repeated that the transactions were generally nothing like so simple in practice as in the above hypothetical illustrations. Most of this exchange business was done through London and comparatively little directly with New York. Sterling exchange dominated the market. Exports, moreover, were financed largely by time bills, which were later discounted in London, not by demand bills. The banks did not "cover" each day their forward contracts for the purchase of exchange with forward contracts in like amount for its sale. Each bank studied its own situation and made its forward contracts according to its own circumstances and its anticipation of the future silver and exchange market. If the bank was

conservative, it kept both sides of the account about equal, that is, it covered all of its forward contracts with reasonable promptness. On the other hand, if it was willing to speculate — and oriental banks generally did speculate in exchange — it oversold sterling when it expected silver to rise, thereby expecting to receive its pay in an appreciating local peso; and it overbought sterling when it expected silver to fall, thereby expecting to pay for its sterling in a depreciating local peso.

Bank facilities of this kind for the avoidance of the risks of exchange fluctuations were available to all importers and exporters of financial standing, and through them the evils commonly attributed to the fluctuating exchange were greatly mitigated. On the other hand, it should be said that the Philippine exchange banks were accustomed to dealing in large figures and had little concern for the small merchants, many of whom were not in a favorable position to protect themselves by forward contracts. Furthermore, as long as a fluctuating exchange existed, there were sure to be some traders who preferred to gamble on the price of silver rather than to shift the exchange risk through forward contracts. The banks' charges, moreover, for the facilities they offered were often high, and involved a real expense to trade.

Attitude of Different Classes toward Proposals for a Gold Standard

The above discussion of the foreign trade situation will go far toward explaining the attitude of different classes in the community toward proposals for the adoption of a gold standard. Chinese exporters, who were dealing mostly with China, naturally favored a continuation of the silver standard; so likewise did the large European export houses, mostly English, Spanish, German, and French, who were reaping extra profits by the downward movement of ex-

change, since they were receiving continually more local pesos for their gold bills, and did not have to pay proportionately more pesos for their hemp, tobacco, sugar, and copra. The bankers likewise were nearly all favorable to a continuation of the silver standard. They were reaping large profits from foreign exchange fluctuations, and from the exchange in the Philippines of local currency for United States currency and vice versa. The great masses of Filipinos rarely came into contact with gold prices and knew nothing about the currency situation. They sold local produce and they bought local produce, for the most part at fairly constant and customary prices. They had no knowledge of the "unstable and fluctuating currency" about which the American officials and the American newspapers were talking so much. The American and European importing houses, on the other hand, were suffering from a continually falling exchange — they bought at comparatively constant gold prices abroad and found difficulty in exacting for their importations higher local currency prices in the Philippines. While exchange was falling it was taking a continually increasing number of local pesos to buy a pound, a dollar, or a franc's worth of supplies abroad. The American merchants who had come to the Philippines to cater to the American trade were much more largely interested in the import trade than in the export trade. These merchants, together with American government clerks, officials, school teachers, and soldiers, were the ones whose opinions were expressed in the American newspapers in the Philippines, in the letters that were sent to America, and in the official reports of government officers. The writer believes that the evidence already cited made strongly in favor of the introduction of a gold standard in the Philippines; he is equally convinced, however, that neither the need nor the demand was as urgent as the reports that reached America made out.

CHAPTER IV

Proposals for Permanent Currency Reform

Broadly speaking, there developed early three proposals for currency reform, each of which had its advocates both in the Philippines and in the United States, and each of which at one time or another passed at least one house of the United States Congress. They were: (1) to continue the silver standard, recoining the existing Mexican and Spanish-Filipino coins into distinctively American coins bearing the insignia of the United States; (2) to introduce the United States currency system as rapidly as possible; (3) to adopt a gold standard with a new coinage, the unit to be a peso equivalent in value to fifty cents of United States money.

Silver Standard with a New Coinage

The first plan, as has been intimated, was favored by the leading export merchants, and also by a great majority of those connected with banking in the Philippines. To most of these persons it was clear that the existing silver standard coins — varying in weight and fineness even among coins of the same denomination, of unequal and often inferior workmanship, and bearing the insignia of the sovereignty of Spain and Mexico — must go. The solution proposed was to recoin this money into American silver standard coins, the unit to be a coin similar to the British dollar which had been coined by England in Bombay since 1894 for circulation in the Orient. The new coins would be

similar in size to the Mexican peso, with which the people were familiar, and the silver standard to which the Islands' trade was adjusted would be continued. There would be little disturbance to business, and the Philippines would have a simple and automatically operating currency in harmony with the currencies of the neighboring countries of China and the Straits Settlements. The coinage, moreover, would be brought under American control, since the coins would be no longer minted in Mexico, but either in Manila or at the mints of the United States.[1]

Against this plan the arguments already cited against the silver standard were urged, and, since it was unanimously opposed by the members of the Philippine Commission, and by a large majority in the United States House of Representatives, it never had much prospect of adoption, although, as will be seen later,[2] it was unanimously adopted by the United States Senate in 1902.

Extending United States Currency System to Philippines

The second plan, that of extending the United States currency system to the Philippines, as it had been extended to Hawaii and Porto Rico,[3] requires more careful attention. To most Americans it was the obvious solution of the problem.[4] This plan was adopted by the House of

[1] Such a plan had been repeatedly suggested during the days of the Military Government. See, for example, Edward W. Harden, Report on the Financial and Industrial Conditions of the Philippine Islands, p. 10; and Edwards, Curr. and Exch. Phil., pp. 50, 52, 54, 58–60, 62–63.

[2] Infra, p. 309.

[3] Supra, pp. 199–202.

[4] Representative James A. Tawney of Minnesota said in the House of Representatives: "When providing a system of coinage for the Philippine Islands was first presented to the Committee on Insular Affairs, I believe I am safe in saying that every Republican member of that Committee, like some of the Republican members of the House, favored the introducing in the Philippine Archipelago, not only the American system of coinage, but our denominations and nomenclature. . . . But the more we investigated the question, the more testimony we received, and the more we heard from

Representatives in January 1903, but was rejected by the Senate and later given up by the House.[1]

Arguments in Favor of United States Currency System. The chief arguments urged in favor of the plan were the following:

(1) It was the simplest gold standard plan to introduce. It would be inexpensive because it would require no new coinage; it would be safe because, unlike the other plans, it would require no experiments in new currency devices. The people in the chief cities and towns were already familiar with American money and this money was working its way into wider use daily. Representative James R. Williams of Illinois said in the House: "So long as we retain those Islands, so long as they are occupied by the American Government, and I may say by the American people, a large amount of American money will be in circulation there, and I believe it will be better, not only for the Americans there, but natives as well, that they should have but one system of currency. A double system can but lead to confusion."[2]

(2) It would be favorable to closer trade relations with the United States. Philippine quotations and price lists would be more readily understood in the United States, and those of the United States in the Philippines. "To put a new and strange system of coinage in the Philippine Islands," said Representative Charles N. Fowler of New Jersey in the House of Representatives, is practically to build "a fence between the trade of those Islands and the trade of . . . [the Pacific Coast] which will always prevail."[3]

(3) The third argument was of a type familiar to all readers of Congressional debates. If introduced into the

the witnesses with respect to industrial, financial, and commercial conditions in the Philippine Islands, the more we were convinced that to introduce our American system of coinage *in toto*, including denomination and nomenclature, would create more distress industrially than exists there to-day." Cong. Rec., 57th Cong., 2d Sess., p. 1081.

[1] See infra, pp. 312–13. [2] Ibid., p. 1047. [3] Ibid., p. 1073.

Philippines the American currency system would "teach . . . [the Filipino] the lessons of the flag and impress upon him the power and glory of the Republic." [1]

Arguments against United States Currency System. The chief arguments urged against the introduction of United States currency were the following:

(1) Prices, wages, and contracts were adjusted to the Mexican peso unit. People thought in terms of that unit. Most of the money in circulation in the Philippines consisted of silver coins; and if United States money were introduced as the sole money of the Islands, a large part of that needed would be in the form of silver. To substitute for the Mexican peso a unit of twice its gold value but represented by a coin containing actually less silver than the Mexican peso would be confusing to the masses of the people. They would demand the same prices and wages in terms of the United States dollar that they had been receiving in the local pesos. In time, of course, the adjustment to the new basis would be effected, but while it was taking place it would lead to frequent exploitation of the ignorant, to much bickering, and to criticism and suspicion of the American authorities. The unfortunate experiences of Porto Rico during the period of transition from the Porto Rican currency to United States currency were several times cited.[2] Urging this argument concerning the disturbance to prices and wages, Governor Taft said before the House Committee on Insular Affairs:

"We were exceedingly anxious not to disturb the coinage as it now exists in the Islands among the Filipinos. I mean . . . that we were exceedingly anxious not to disturb the values of Oriental peoples; and the Filipinos who do not differ from other Oriental peoples in that respect, have a great regard for tradition and names;" and again, "I am very certain that to attempt to adopt as a whole the coinage

[1] Ibid., p. 1070.

[2] For an account of this experience see supra, pp. 212–24.

of the United States in those Islands would be productive of nothing but disaster." [1]

(2) The second argument related to the size of the unit itself, assuming that the transition to the new basis had been successfully accomplished. The United States dollar is a large monetary unit, one of the largest in the world, the English pound being the only important one that is larger. For a poor people like the Filipinos, the great bulk of whose transactions were petty, the dollar unit and the various coined fractions of the dollar would represent inconveniently large sums. Referring to this difficulty, Mr. Charles A. Conant said:

"A native laborer accustomed to receiving a peseta, or 20 centavos, for a day's labor, would find an American 10-cent piece less suited to his wants, even though he was satisfied that it represented the same value. The reason would lie in the fact that the American coin would be less easily exchangeable for smaller subdivisions. The American 10-cent piece is the smallest silver coin which can be used with convenience, but the peseta, or piece of 20 centavos, is twice its size and is divisible into two pieces of about the size of the American 10-cent piece, each representing an exchange value of 5 cents in gold. As this difficulty was tersely put to the Schurman Commission in 1899 by Mr. Charles Ilderton Barnes, 'If the agriculturists are paid in gold, they cannot make that gold go around like twice the number of dollars in silver.'" [2]

As a partial remedy for this difficulty Representative E. J. Hill of Connecticut, a leader of the movement in the House to extend the United States currency system to the Philippines, suggested that an American half-cent piece be coined for circulation in the Philippines.[3]

[1] Quoted in Congressional debate, Cong. Rec., 57th Cong., 2d Sess., p. 1021.

[2] Special Report on Coinage and Banking in the Philippine Islands. Made to the Secretary of War, 1901, pp. 9–10.

[3] Cong. Rec., 57th Cong., 2d Sess., p. 1078.

(3) A third argument was that of the danger of counterfeiting. At the average price of silver for the year 1902 the bullion value of the United States silver dollar was about 41 cents and that of two half dollars, four quarters, or ten dimes was about 38 cents. This would offer a large temptation to counterfeiting in a country like the Philippines where labor was cheap, where many of the natives were exceedingly skillful in handiwork with silver, and where a strong secret service had not yet been extended throughout the country. Furthermore, even if such counterfeiting could have been prevented in the Philippines, there would have been the serious problem of preventing counterfeits made in China and Japan from being imported into a country with such an enormous coast line as the Philippines. Java had experienced serious trouble through the counterfeiting of Dutch fiduciary silver coins, and American silver coins had already been to a considerable extent counterfeited in the Philippines.

While this difficulty was a real one, the writer is convinced that its importance was exaggerated. With rapidly improving conditions in the Philippines the police authorities undoubtedly could have handled the situation. During recent years the difference between the bullion value and the money value of Philippine silver coins has frequently been large,[1] but there has been little or no counterfeiting.

(4) The fourth argument against the adoption of United States currency related to gold coin. It was claimed that to maintain the parity of United States silver and paper in the Philippines with gold, a gold reserve would be needed in the Islands and also a substantial amount of gold coin in circulation. But in oriental countries gold had a way of rapidly disappearing from circulation and being absorbed in hoards and in jewelry and trinkets. Something over $10,000,000 of gold coin had been brought to the Philip-

[1] Infra, p. 353.

pines by the military and naval authorities prior to September 15, 1901 and paid out for wages and supplies, yet it was a rare thing in 1903 to see a gold coin in circulation. It had been in part melted down for ornaments, in part hoarded by the natives and Chinese, and in part shipped to China and other neighboring countries for similar purposes. The attempted provision of a supply of gold for reserve and circulating purposes in the Philippines, it was argued, would impose upon the United States the expenses of its shipment from America to the Philippines, only to have it withdrawn in a continuous stream from the Philippines to China at the slight expense of shipment from Manila to Hongkong. A long time would be required before China would reach the gold saturation point. This drain of gold to the Orient would place a heavy burden on the United States and tend to deplete unduly its gold supply.

This argument carried weight if one accepted its major premise, that the introduction of the United States currency system into the Philippines would necessitate a gold reserve in Manila and gold coin in circulation. The premise, however, is a doubtful one. Had the United States currency system been introduced, it is very probable that little or no gold coin would have been needed, and that trade balances would have been settled by the shipment of United States paper money, particularly gold certificates, between the United States and the Philippines.

A Distinctive Philippine Coinage on a Gold Basis

This brings us to the third proposal, *i.e.*, that of providing a distinctive Philippine coinage on a gold basis, with a peso equal to fifty cents of United States money as the unit of value. Inasmuch as this plan is the one that subsequently became law it will be well to trace briefly its historical development.

Early Formulations of Plan. The first official formulation of this plan was contained in the Report of the Taft Philippine Commission under date of January 24, 1901.[1] After reviewing some of the evils of the silver standard the Commission said:

"As a solution of the problem it has been suggested . . . that the United States dollar, or a theoretical United States-Filipino gold peso, of the value of half a dollar, like the theoretical gold yen which is the unit of currency in Japan, should be made the standard of value, but that a silver United States-Filipino peso, containing a small percentage less silver than the Mexican dollar, should be coined, which would be receivable in business transactions as the equivalent of 50 cents in United States money, together with convenient subsidiary coins of the same character. The amount of silver in the peso should be such a percentage less than that in the Mexican dollar that its intrinsic value would not at any time warrant its export from the Islands, but its convertibility into American money at uniform fixed rates, guaranteed by the United States, would make it a convenient and useful currency for ordinary business transactions in the Islands. . . . The Mexican and Filipino silver coins in the Islands could be recoined into the new United States-Filipino coins as fast as they came into the treasury, which would within a comparatively short time perform the functions now performed by the Mexican and Filipino silver coins. At a suitable later date *the Mexican and Filipino silver coins could all be brought in for coinage by a law providing that they should not be legal tender after a date fixed in the law.*[2] The local mint [in Manila] can be put in order for such recoinage within one month's time, according to the report of Major L. A. Lovering, Acting Inspector-General."

[1] Pages 91–92.

[2] The italics are mine. This passage contains an erroneous notion concerning the influence of the legal tender quality that was entertained by nearly all officials connected with the Philippine currency reform down to the latter part of 1903. Cf. infra, pp. 330–32.

In the summer of 1901 Mr. Charles A. Conant was sent to the Philippines by the War Department for the purpose of consulting with the Philippine Commission on the subject of currency reform in the Islands. He spent about a month in the Philippines, and had interviews on the subject with leading business men and bankers, both in the Philippines and in other oriental countries. His report to the Secretary of War, which has already been cited,[1] was made November 25, 1901. The result of his investigations may be stated in his own words:

"Examination of the monetary conditions in the Philippines led the writer to accept the plan recommended by the [Philippine] Commission in its report for 1900, in its general scope, as the best solution of the difficulties prevailing there. It remained, after reaching this decision, to work out the details with Judge Henry C. Ide, the Secretary of Justice and Finance in the Philippines. . . . The plan prepared by Judge Ide and the writer was submitted to the [Philippine] Commission, carefully discussed and amended in trifling details, and was then transmitted (in November, 1901) to the War Department with the unanimous approval of the Commission. . . ."[2]

The Philippine Currency Problem in the United States Congress. The foregoing plan, in which the unit of value was to be a silver peso containing 385.8 grains of silver .835 fine,[3] maintained at a parity with 50 cents gold of United States money, was approved by Secretary of War Elihu Root, and on January 7, 1902 bills embodying

[1] Supra, p. 304.

[2] Conant, The Currency of the Philippine Islands, in Ann. Amer. Acad. Pol. and Soc. Sci., Nov. 1902, p. 49.

[3] This is the weight but not the fineness of the Spanish-Filipino pesos (Alfonsinos) then in circulation in the Philippines. (Cf. supra, p. 249.) It is exactly the weight but not the fineness of two American half dollars. For January 1902 it would have represented an average bullion value of about $0.41.

it were introduced in both houses of Congress;[1] in the Senate by Mr. Lodge of Massachusetts, chairman of the Committee on the Philippines, and in the House by Mr. Cooper of Wisconsin, chairman of the Committee on Insular Affairs. Hearings were held by both committees. The result was that the House Committee reported favorably the Philippine Commission's plan; while the Senate Committee, influenced largely by the testimony of partisan witnesses representing English banks with branches in Manila and business houses interested in the Philippine export trade, struck out the Commission's gold standard plan and substituted a silver standard plan providing for the free coinage of a silver dollar containing 416 grains of silver .900 fine, *i.e.*, a dollar of identical weight and fineness with the British dollar. Each house sustained the action of its committee by a large vote, that in the Senate being unanimous, and that in the House being 89 to 55. The conference committee to which the bills were now referred could not reach an agreement on the subject of the standard, so the matter of a thoroughgoing currency reform was dropped.

The legislation therefore on the subject of the currency contained in the Philippine Civil Government Act of July 1, 1902 was limited to the subjects of subsidiary and minor coins.[2] However, none of the subsidiary silver coins here authorized were ever coined by the Philippine Government, and none of the minor coins until the legislation authorizing them was reaffirmed the following year in the Philippine Coinage Act.[3] This subsidiary and minor coin legislation was a congressional blunder. Fortunately, however, it did no positive harm. Concerning it the Philippine Commission said in its annual Report for 1902:[4]

[1] The coinage provisions in full of the bill will be found in House Reps., 57th Cong., 1st Sess., IX, No. 2496, pp. 13–14.

[2] Fractional silver coins of 50, 20, and 10 centavos were to be coined containing 385.8 grains of silver .900 fine to the peso. Sec. 77 of the Act.

[3] Cf. infra, p. 315.

[4] Part II, p. 706.

"It is not apparent as to whether the coins therein named are to be made legal tender for dollars payable in local currency, such as at present exist, or in a new local currency such as the Commission have recommended, or in money of the United States, inasmuch as no unit of value is established by the Act. It is apparent that the subsidiary and minor coins referred to are to be fractional parts of some unit. Without knowing of what unit they are fractional parts, it would be very difficult to provide for their circulation. If such coins should be immediately coined and issued, and a subsequent Act of Congress should make the unit to be the United States-Philipino peso of 50 cents gold value, as recommended by the Commission, the proposed coins would have more than 20 per cent greater value than if legislation by Congress should cause them to be only fractional parts of a free silver peso coined under free-coinage principles, or of the Mexican peso now in circulation in the Islands. With such uncertainty as to the status of the subsidiary and minor coins, it would be difficult to maintain them in general circulation; the banks would decline to pay them out, and would retain them as fast as they would come into their possession, in view of the fact that, if the free-coinage system or the continuance of the Mexican system should ultimately prevail, they would lose nothing by retaining them in their vaults, and that, if the system heretofore recommended by the Commission should be adopted, these coins would thereby have fixed and definite values, namely, as fractional parts of a peso worth 50 cents, and the banks would thus have made a profit of more than 20 per cent in the value of the coins so hoarded by the simple process of retaining them from circulation until the fixed unit of value should have been adopted. It was learned that the banks were taking this view of the situation and had indicated a willingness to take a large amount of the new subsidiary and minor coins should they be issued, which manifestly they could well afford to do under such circumstances. In view of all these facts, on the 30th day of September, 1902, the Commission resolved: 'That no action should be taken for the coinage of the minor and subsidiary

coins referred to until a unit of value shall have been fixed by act of Congress or otherwise, the legislation of Congress referred to, being in the opinion of the Commission, permissive and not mandatory.'"

Again in its annual report for 1902, as in the reports for the two preceding years, the Commission implored Congress to authorize a gold standard currency system for the Philippines along the lines of the Cooper bill,[1] which in 1901 embodied the plan recommended by the Commission. This time it cited[2] in support of the plan the testimony of Professor Jeremiah W. Jenks, then of Cornell University, who had just made an investigation into economic questions in the English and Dutch colonies in the Orient.[3]

Early in the second session of the 57th Congress Representative Cooper of Wisconsin again introduced a bill (H. R. 15,520) embodying the Philippine Commission's plan of a 50-cent gold standard peso. The bill was referred to the Committee on Insular Affairs, by which, on January 9, 1903, it was reported back to the House with amendments and an accompanying report.[4] There was also a minority report of the Committee proposing a bill (H. R. 16,657) extending the United States currency system to the Philippine Islands. For some days the proposals were debated in Committee of the whole, Mr. Cooper of Wisconsin leading the debate in favor of the majority report, and Mr. Hill of Connecticut that in favor of the minority. The arguments on both sides were essentially those already outlined.[5] The majority laid emphasis upon the fact that their bill was supported by Governor Taft, all the members of the Philip-

[1] Phil. Com. Rep., 1902, Part II, pp. 699–707.

[2] Ibid., pp. 703–704.

[3] Jeremiah W. Jenks, Report to the Secretary of War on Certain Economic Questions in the English and Dutch Colonies in the Orient, 1902, pp. 30–31.

[4] Cf. Cong. Rec., Dec. 3, 1902, p. 43 and House Reps., 57th Cong., 2d Sess., I, No. 3023.

[5] Supra, pp. 301–308.

pine Commission, and by the experts who had carefully studied the problem. The minority characterized the majority bill as providing a "new patent hybrid system" of currency, and of attempting to stabilize the silver standard rather than to provide a gold standard.[1] They emphasized the simplicity and safety of the proposal to extend the American currency system to the Islands, and the political and trade advantages of having a uniform currency throughout the territory of the United States. On January 22 the House, by a vote of 147 to 127, rejected the Cooper plan and adopted the United States currency plan of the minority report, substituting it for section 1 of the Cooper bill.

The following day the bill (H. R. 15,520) so amended was introduced in the Senate by Mr. Lodge of Massachusetts, read twice by title, and referred to the Committee on the Philippines. A new light on the subject had appeared to the members of this Senate Committee since the preceding session of Congress in which they had favored a continuation of the silver standard; for on January 26 Senator Lodge for the Committee reported back the House bill with everything struck out but the enacting clause, and with a plan essentially like that of the original Cooper bill inserted in its place.[2] In defending this plan Mr. Lodge said: "I . . . wish to say that the Committee who were convinced last year of the widom of the substitute which has been voted down, are now satisfied by the change of circumstances and in the rates of silver in the East that

[1] Representative Hill of Connecticut in House debates, Cong. Rec., 57th Cong., 2d Sess., p. 1053.

[2] The full text of the bill at this stage will be found in the Cong. Rec., 57th Cong., 2d Sess., pp. 2248–49. This bill made the unit of value a theoretical gold peso of 12.9 grains of gold, .900 fine, equivalent to 50 cents of United States gold coin. It raised the size of the silver peso from 385.8 grains of silver .835 fine (as provided in the original Cooper bill) to 416 grains .900 fine, placed a limit of 75,000,000 pesos on the amount that could be coined, and made some further changes of minor importance.

that legislation is no longer possible, and that some legislation in the nature of that embodied in the Senate bill is the only practicable way of dealing with the question at this time."[1] There was little debate in the Senate. Senator Dubois of Idaho offered as a substitute the silver-standard bill which had been passed unanimously by the Senate at its previous session, but it was rejected.[2] The bill as introduced by Mr. Lodge was passed by the Senate February 16. In this form it went to the House and was referred to the Committee on Insular Affairs. On February 20 the Committee reported it back with a few inconsequential amendments.[3] The House now receded from its previous action and adopted the bill February 24, 1903 by a vote of 139 to 104.[4] The following day the Senate accepted the amendments of the House, and the bill was signed by President Roosevelt, March 2, 1903.[5]

[1] Cong. Rec., 57th Cong., 2d Sess., p. 2251.
[2] Ibid., pp. 2249–51.
[3] Ibid., p. 2573.
[4] Ibid., p. 2580–81.
[5] The account of the reform from this point to April 1, 1905 is a revision and amplification of the author's article on The Establishment of the Gold-Exchange Standard in the Philippines, published in the Quarterly Journal of Economics for August 1905, pp. 585–609.

CHAPTER V

THE FUNDAMENTAL LAWS OF THE PHILIPPINE CURRENCY REFORM

THE fundamental laws of the Philippine currency reform were the Philippine Coinage Act, whose enactment by the United States Congress was discussed in the preceding chapter, and the Philippine Gold Standard Act, which was passed about seven months later by the Philippine Government under the authority given in the Philippine Coinage Act. It will be the object of this chapter to describe the main provisions of these two laws.

The Philippine Coinage Act

The main provisions of this Act were as follows:

(1) The establishment of a gold standard with a theoretical gold peso (like the theoretical gold yen of Japan), consisting of 12.9 grains of gold .900 fine, as the unit of value. This unit was equivalent to exactly one tenth of a five dollar gold piece or to 50 cents United States currency.

(2) The coinage of a silver peso containing 416 grains of silver .900 fine, and of subsidiary coins of proportionate weights[1] and the same fineness, the peso to represent the above-mentioned gold unit of value. This silver peso weighed about 0.44 per cent more than an American silver dollar and about 0.40 per cent less than a Mexican peso; its fine silver content was about 0.85 per cent larger than that of the American dollar and about 0.70 per cent smaller

[1] The 10 and 20 centavo pieces contained half a grain less to the peso than the peso piece.

than that of the Mexican peso. At the average price of silver in London for February 1903 — the month just preceding the date of the passage of the Act — the bullion value of this coin was $0.3777. The money value of the coins was thus 32.4 per cent greater than the bullion value. This appeared to be an ample margin of safety. Minor coins of nickel and copper had been provided for in the Philippine Civil Government Act of July 1, 1902,[1] and the legislation authorizing them was reaffirmed.

(3) The issuance of silver certificates, similar to the gold and silver certificates of the Unite States, against which silver pesos of an equal value were to be held in reserve. Certificates were to be in denominations of P2, P5, and P 10.

(4) The establishment of a gold reserve for the maintenance of the parity of the coins with gold and for the provision of funds for the initial purchases of silver required for the coinage. To this end the Act authorized the issuance by the Philippine Government of temporary certificates of indebtedness to the amount of $10,000,000, paying 4 per cent interest, and redeemable in gold coin of the United States at the end of one year.

(5) The making of gold coins of the United States and new Philippine silver pesos unlimited legal tender for future obligations, "unless otherwise specifically provided by contract." Debts contracted prior to December 31, 1903 were made payable in the legal tender currency existing at the time of the making of the contracts, unless otherwise specifically provided. The new subsidiary silver coins were made legal tender to the amount of ten pesos. Section 13 of the Act removed the legal tender quality after December 31, 1903 from all other kinds of money circulating in the Islands.[2]

[1] Cf. supra, p. 309.

[2] As a result of an oversight, the sweeping legal tender provision of this section removed the limited legal tender quality from the minor coins of

These are the essential points of the currency scheme as laid down by Congress. Wide discretionary powers were left to the Philippine Government, which was to construct the Philippine currency system within the broad lines laid down by the Act of Congress.

Immediately upon the passage of the Act arrangements were made through the Bureau of Insular Affairs at Washington for the issue and sale of the certificates of indebtedness. Three million dollars worth of these certificates were sold in March and three million more in August. The facts that the certificates were placed upon the market at favorable times, and that the Secretary of the Treasury agreed to accept them as security for the deposit of government funds in national banks, resulted in their being taken up at very favorable rates.[1] The premiums realized, together with the interest obtained on the proceeds while they were deposited in New York, actually yielded the Government for some time a direct net income on its debt.

The new Philippine coins began to arrive in Manila from the United States mints in the fore part of June 1903, and were first placed in circulation on July 23 by means of deposits in certain Manila banks and payments for salaries and other government obligations. The parity of the new coins was maintained at first through their redemption in United States money on demand at the rate of P2 for $1 at the Philippine treasury.

The Philippine Government had early taken measures to transfer the Government's business to the new currency basis as soon as this currency should be put in circulation. Governor Taft issued an executive order May 16 directing disbursing officers to deposit in the insular

nickel and copper whose coinage had been authorized by the Act of July 1, 1902. The result is that it is impossible to this day to pay completely with legal tender money a debt involving an odd amount requiring the use of minor coins.

[1] The premiums realized on these first two issues were 2.513 per cent and 2.24 per cent respectively.

treasury such local currency in their possession as was not needed to complete their disbursements for the fiscal year ending June 30, and, upon closing their accounts for the fiscal year, to deposit at once all local currency balances due the Government.[1] On July 13 he issued another executive order requiring that "all contracts hereafter made by the various bureaus and officers should provide for payment in the new Philippine currency or the established equivalent in United States currency, at the option of the Government, and, where possible, all existing contracts should be so amended."[2] The order further provided that all wages of insular employees should be readjusted and made payable in Philippine currency or in United States currency. Again, on July 30, another executive order was issued[3] authorizing the Insular Treasurer to exchange the new currency for the old at the official rate with the various provincial treasurers, and making the cost of transportation a proper charge upon the insular treasury.

The writer arrived in Manila, August 1, 1903, and from that time until February 1906 acted as "expert adviser" to the Philippine Government in the work of the currency reform.

Philippine Gold Standard Act

On October 10, 1903 the Philippine Gold Standard Act[4] was passed by the Commission. It has previously been noted that the Philippine Coinage Act of Congress left the working out of the details of the new currency system to the discretion of the Philippine Commission. It was to fill in these details and to establish the proper administrative machinery for the inauguration and maintenance of the new system that the Philippine Gold Standard Act was passed. The immediate problem to be met

[1] Executive Orders and Proclamations, 1903, pp. 47–48.
[2] Ibid., p. 67. [3] Ibid., p. 85. [4] Act 938.

was the creation of a mechanism for the maintenance of the parity of 30 to 40 millions of pesos of the new silver coins with gold, and for the adjustment of the currency supply to the demands of trade; also to provide a machinery for the exchange of pesos for silver certificates, and of silver certificates for pesos.

The Philippine Gold Standard Act placed the new currency upon the gold-exchange standard. Its principal provisions may briefly be summarized as follows:

(1) The establishment in the insular treasury of a separate and trust fund, to be known as the Gold Standard Fund, this fund to be composed of all the proceeds of the certificates of indebtedness previously referred to, of all seigniorage profits realized in the coinage of the new currency, of all profits from the sale of exchange, and of "all other receipts in the insular treasury inuring to the Insular Government in the exercise of its function of furnishing a convenient currency for the Islands." The fund must be used exclusively for the maintenance of the parity of the new currency and the expenses incident thereto, including the purchase of bullion for new coinage and its transportation, mintage, etc. The law provided that part of the Fund should be held in Manila and part in New York.

(2) "For the purpose of facilitating the more efficient discharge of the functions of the Insular Government with respect to the circulation of the currency . . . and for the purpose of maintaining the parity" there was created in the Bureau of the Insular Treasury a division known as the Division of the Currency, presided over by an officer known as the Chief of the Division of the Currency.[1]

(3) For the maintenance of the parity three forms of

[1] Upon the passage of the Philippine Gold Standard Act, the writer was appointed to the position of the Chief of the Division of the Currency, which he held until February 1906, when the establishment of the gold-exchange standard was completed.

redemption were provided in the law, the principal one being mandatory on the part of the Government, and the other two incidental and optional: (*a*) The Insular Treasurer was authorized and directed to sell on demand, for Philippine or United States currency, drafts on the Gold Standard Fund in New York, charging for the same a premium of three fourths of 1 per cent for demand drafts and of $1\frac{1}{8}$ per cent for telegraphic transfers. The depositary of the Gold Standard Fund in New York was likewise directed to sell exchange on the Gold Standard Fund in Manila, charging therefor the same premium rates.[1] (*b*) On the approval of the Secretary of Finance and Justice, the Insular Treasurer was authorized to exchange United States paper currency for Philippine currency, and Philippine currency for United States paper currency, at the rate of two pesos Philippine currency for one dollar United States currency. (*c*) On the approval of the Secretary of Finance and Justice, the Insular Treasurer was authorized to exchange for Philippine currency United States gold coin or gold bars, charging for the same a premium sufficient to cover the expenses, at commercial rates, of transporting United States gold coin from New York to Manila.

All money presented to the Insular Treasury for redemption or for the purchase of exchange on New York, pursuant to the above provisions of law, must be immediately withdrawn from circulation and not paid out again except in response to similar counter-demands, or for the purchase of bullion to provide an increase in coinage, or to meet certain expenses incidental to the introduction and maintenance of the currency.

The object of the sale of drafts above mentioned was to

[1] On November 2, 1904 the rates in New York for drafts on the Gold Standard Fund in the Philippines were reduced to three fourths of 1 per cent for telegraphic transfers and three eighths of 1 per cent for demand drafts. Cf. infra, p. 321 and 356.

provide a means for the maintenance of the parity, and, to that end, of automatically adjusting the currency supply to the demands of trade without the necessity of introducing gold coins into circulation; in other words, to create "a gold standard without a gold currency." While the plan was not a new one, it had probably never been attempted elsewhere on such a large and systematically worked out plan as in the Philippines at this time.[1] The new Philippine currency is capable of performing all the functions of a gold currency except that of being shipped to and from foreign countries in settlement of trade balances. This function of money, or of bullion which is promptly exchangeable for money on demand, is not only important because it is the means by which foreign trade balances are settled when they become unusually heavy in one direction or the other, but it is still more important because it is through the exercise of this function that the currency supply is adjusted to the currency demand, and that its parity is maintained through a reduction in the circulation in times of relative redundancy and an increase in times of relative scarcity.

It is a familiar principle that, when the balance of trade becomes strongly "unfavorable" in gold standard countries, *i.e.*, when the currency becomes relatively redundant, exchange rates move to the gold-export point and gold is exported, and, on the other hand, when the balance of trade becomes strongly "favorable," *i.e.*, when the currency becomes relatively scarce, exchange rates move to the gold-import point and gold is imported. All the expenses of shipping the gold, including those of freight, insurance, interest, and abrasion, are borne by the shipper. Under the gold-exchange standard, as it exists in the Philippines, the premiums charged by the Government in Manila for exchange on New York, and in New York for exchange on Manila, are fixed so as to represent as nearly as possible

[1] Cf. supra, pp. 122–23.

the actual commercial cost of shipping gold bars between the two cities.[1]

When, for example, exchange rates in Manila on New York reach the gold-export point, the actual gold is not exported, as in the United States and other strictly gold standard countries, but the Government gives the would-be gold exporter, in exchange for his Philippine currency in Manila, the gold credit in New York, and charges him for the transfer simply the amount the actual exportation of gold bars to New York would have cost him, were he to have exported gold. Thus there is removed from circulation an amount of coin (in addition to the premium charged) equivalent to the amount he would have shipped. When, on the other hand, exchange rates in New York on Manila reach the point at which it would be profitable to export United States currency from New York to the Philippines, the authorized agents of the Philippine Government in New York give the would-be currency exporter in New York, in exchange for United States currency paid into the Gold Standard Fund there, Philippine currency laid down in Manila, and charge him in the same manner a premium sufficient to cover the expenses the actual shipment of the currency would otherwise have involved. When the drafts are cashed in Manila an equivalent amount of money is put into circulation from the Gold Standard Fund. The system is just as automatic in its regulation of the money supply as the strict gold standard, although there is no gold in circulation and no gold reserve in the Philippines; and no gold or other currency worth mentioning is now shipped back and forth between the Philippines and the United States in settlement of trade bal-

[1] As noted on page 319 the rate charged by the Philippine Government's agent in New York for exchange on the Philippines was reduced in November 1904 below the gold-import point for the Philippines. This reduction in rate was to prevent the settlement of trade balances by the shipment of United States paper currency, which could be imported more cheaply than could gold bars.

ances. Aside from such official transfers as those for the army and navy, the Government has nothing to do with commercial exchange except at the gold and currency shipping points. These points represent the limits of fluctuation in the gold-exchange value of the peso which the Government imposes. Commercial rates cannot appreciably exceed nor fall below these respective limits.

Another method of settling trade balances was rendered possible under the law, for the occasions when exchange rates should be unfavorable for settling balances with other countries by means of New York exchange. The law authorized the Treasurer of the Philippine Islands, on the approval of the Secretary of Finance and Justice, to sell United States gold coin or gold bars at a premium not greater than sufficient to cover the expenses of shipping gold coin from New York to Manila.[1] A small premium on gold coin and gold bars seemed necessary to protect the Government from the trouble and expense of shipping gold from the United States to Manila, only in turn to have it melted down, hoarded, or shipped to China and other neighboring countries at the slight expense involved in its shipment to those places from Manila. This provision of the law has never been utilized.

The exchange by the Insular Treasurer of Philippine currency for the various kinds of United States paper currency, and of the various kinds of United States paper currency for Philippine currency, which the law authorizes, on the approval of the Secretary of Finance and Justice, found its *raison d'être* in the considerable amounts of United States currency circulating in the Islands, the existence of many contracts payable in United States currency, the absence of any Philippine currency notes of large denominations,[2] and the convenience of persons traveling to and from the home land.

[1] Cf. supra, p. 319.

[2] The Act of Congress approved February 6, 1905 authorized the issuance

United States silver, nickel, and copper coins were not recognized in the Philippine Gold Standard Act. Their circulation in the Islands had been found undesirable because of their liability to be counterfeited and of the difficulty of readily distinguishing them from similar Philippine coins having but half the value.

of Philippine silver certificates in denominations as high as 500 pesos. Up to that time the 10-peso certificate was the largest denomination in circulation. The bank notes of the Spanish-Filipino Bank were in denominations ranging from 5 to 200 pesos.

CHAPTER VI

Withdrawal of Local Currency from Circulation

A serious problem which early presented itself to the Philippine Government was that of the withdrawal of the old currency from circulation.[1] Here was a circulating medium the great bulk of which had existed in the Islands for generations. It had in its favor all the prestige and prejudice which generations of use can create among an oriental people. The problem of displacing it by a new and unfamiliar currency would, under any circumstances, have been a difficult one. In this case, however, it was rendered especially so by the fact that the new coins were worth more in exchange for gold than were the coins in circulation. The new currency was thus the dearer one, and the old, being the cheaper, had behind it the tremendous force of self-interest as exemplified in Gresham's familiar law.

The Spanish-Filipino money was looked upon as in a peculiar sense the money of the country, and the Philippine Government felt itself morally bound to make careful provision for its redemption. Towards the Mexican currency and the other foreign coins in circulation in the Islands the Government did not feel the same degree of moral obligation. The importation of these coins, it will be recalled, had been prohibited from 1877 to August 1898, and a goodly portion of those in circulation had been illicitly smuggled into the Islands with the connivance

[1] For an account of the character and amount of this currency see supra, pp. 249–53.

of Spanish customs officials.[1] The Mexican peso, moreover, was an important article of merchandise throughout the Orient, carried with it approximately [2] its full value in silver bullion, and was thought to be well able to take care of itself.

The bankers of Manila and a large number of the more prominent business men of the Islands strongly urged upon the Government the redemption of all the old local currency at par in the new Philippine currency. Many arguments were advanced in favor of this plan, the strongest of which were: first, that it would greatly expedite the transition to the new currency and materially reduce the unsettlement of business which always characterizes such a transition period; and, second, that to the great mass of natives who bought and sold only native produce, and who seldom, if ever, came into contact with gold prices, the new peso would for a long time have no more purchasing power than the old, and that to compel these holders of the old currency to exchange it for the new at a discount would involve them in an actual loss.

Despite the great force of these arguments, especially the latter, there seemed to be insuperable obstacles to the redemption of the old currency at par. The amount of this currency in the Islands was unknown and estimates varied widely.[3] The redemption of all the local currency

[1] Cf. supra, pp. 247–48.

[2] Cf. supra, p. 251.

[3] In the latter part of 1903 the writer made an estimate of the amount of Spanish-Filipino currency and Mexican currency in the Islands. The method employed was to compute for a certain date the amounts of the different kinds of currency in the Philippine banks and the insular treasury. It was known that there were in the country 5,500,000 Alfonsinos. Assuming that the Alfonsinos in general circulation bore the same proportion to the Mexican pesos and to the other Spanish-Filipino pesos that they bore in these bank and treasury holdings, and making allowance for currency exports and imports subsequent to the date for which the figures were computed, the writer arrived by a simple calculation in proportions at Pfs. 10,000,000 for the Spanish-Filipino currency, in addition to the Pfs. 5,500,000 Alfonsinos, and at Pfs. 15,000,000 for the Mexican currency. The total

at par would have meant the redemption of Mexican pesos at a rate above their bullion value and above the values at which they would otherwise have circulated. Subsequent fluctuations of silver showed that the prices paid for Mexican pesos would have varied from about 2 to 16 per cent above their value as bullion. Estimates made at the time showed that it would be necessary for the Government to redeem the Spanish-Filipino money at a discount of about 15 per cent if it were to avoid a net loss in the recoinage of this money into the new currency, to say nothing of realizing any seigniorage profits. It has since proven that the net loss, inclusive of seigniorage, which the Government would have suffered by redeeming the Spanish-Filipino currency at par would have varied from something like 16 to 30 per cent, according to the market price of silver. Premiums like those above mentioned on Mexican pesos would certainly have led to the smuggling of this money into the Islands. The Philippines possess an enormous coast line, their distance from neighboring countries is small, most of these countries were saturated with Mexican pesos, and the Chinaman is an adept smuggler with plenty of experience gained in the smuggling of Mexican pesos during the Spanish régime.[1] Moreover, the large expense which the redemption of local currency at par would have imposed upon the Government would have had to be borne by the entire people in the form of increased taxes, while the profits would have been realized not so much by the masses as by the Chinese smugglers and by the wealthier classes of the population in whose hands the bulk of the local currency was held.

The argument advanced that the Philippine Government

was therefore estimated at Pfs. 30,500,000, exclusive of bank notes, Chinese subsidiary silver, various kinds of copper coins, and certain old Spanish coins. The practical completion a few years later of the work of withdrawing this old currency from circulation proved the substantial accuracy of this estimate. Cf. infra, p. 345–46.

[1] Cf. supra, pp. 248–49.

was under a moral obligation to redeem the old currency at par did not appeal strongly to the Government. For some time, the Mexican peso, together with the various kinds of Spanish-Filipino money and other money circulating in the Islands, had fluctuated with the market price of the Mexican peso in the oriental markets, and closely in harmony with the fluctuations in the London price of silver. It was difficult for the Government to see why it was morally bound to redeem this currency at gold prices varying from 4 to 18 per cent higher than those at which it had for some time circulated, and would have continued to circulate had the Government not taken measures for its withdrawal. After a careful study of the situation and consultation with the authorities at Washington, it was unanimously decided by the Philippine Commission that the circumstances did not justify the enormous risk and expense which the redemption of the old currency at par would make necessary.

Fortunately for the displacement of the old currency by the new, although unfortunately in every other way for the Islands, the Philippine rice crop for 1903 was almost a complete failure. Over thirty million pesos' worth of rice was imported into the Islands during the year, and, largely in consequence of this fact, the balance of trade was strongly against the Islands, and there was during the year a net commercial exportation of over fifteen million Mexican pesos. This outward movement of Mexican pesos was somewhat further stimulated, no doubt, by the anticipated and actual introduction of the new currency and the Government's declared future policy of discriminating against the old currency.

Unfavorable Public Reception of the New Currency

The new Philippine coins began to arrive in Manila from the United States mints in the fore part of June 1903, and

were first placed in circulation, as previously stated, during the latter part of July. The reception given to the new currency by the public was at first not a hearty one. The new peso was no larger than the Mexican peso, upon the basis of which prices had been adjusted for generations, and the Chinese and natives could not see why it should be worth any more. In fact for some time many of them, under the influence of custom, actually preferred the old pesos with which they were familiar, even at the same rate.

During the period from August 1, 1903 until the end of the calendar year, a new Philippine peso could be exchanged at the banks or the Chinese exchange shops of Manila at anywhere from Pfs. 1.04 to Pfs. 1.18. The great majority of merchants and shopkeepers, however, would accept the new pesos simply as the equivalent of the old.[1] It was but natural, therefore, that the old money should be preferred to the new by all persons who had money to spend in the Islands. *It cost less and went as far.* Being the cheaper money, it tended quickly to drive the new money out of circulation on the principle of Gresham's law. Persons receiving the new money from the Government promptly exchanged it at a premium at the banks and the shops of the Chinese money-changers for the old currency, while the banks in turn presented the new currency to the Government for United States currency or for the purchase of New York drafts to be shipped out of the Islands in settlement of the heavy unfavorable trade balance existing at the time. Later, when the balance of trade changed, foreign credits set up by these Gold Standard Fund drafts were drawn upon to purchase Mexican currency for importation, thereby creating an "endless chain." Almost as rapidly as the new currency was paid out during August and September it came back to the Government through these channels.[2]

[1] The European and American stores handling largely imported goods were exceptions to this rule.

[2] The members of the Philippine Commission who formulated the plan

The currency tangle was the popular topic of conversation among Europeans and Americans in the Philippines. It was featured in the newspapers, and the Government's "currency reform" was made the object of criticism and ridicule.

The difficulty was partly remedied in Manila by an ordinance passed by the Municipal Board, on the recommendation of the writer, requiring all merchants in the city to post in their places of business placards stating in the English, Spanish, and Tagalog languages in what currency their prices were fixed, and at what rates they received the various other currencies circulating in Manila.[1] Over seven thousand of these placards, with changeable rate slips attached, were distributed free of charge in the city. The result was favorable. The people soon learned at what stores they could get the full value of their new

for the Philippine gold standard in 1901 and 1902, the experts who assisted them in connection with the drafting of the early legislation, and the congressional leaders all appear to have failed to anticipate this, the most serious difficulty encountered in the inauguration of the gold standard in the Philippines. They all placed too much reliance upon the effectiveness of removing the legal tender quality from the old money in forcing it out of circulation — a measure which seems to have had little or no influence. The only person who appears to have anticipated the difficulty to any extent was Senator Rawlins of Utah, who, in the Senate, February 25, 1903, took the position that the plan proposed would lead to a dual currency. He said: "We shall then have the Mexican money now in circulation and the money provided by this bill, the former the only money with which the native inhabitants are familiar. The present currency, of greater stability and value in its purchasing power, will be demanded by the foreigners and by the Americans. There is a rule that cheap money drives out good money; but it is very questionable whether the Mexican currency in the Philippine Islands will ever be driven out by the currency which this bill is intended to provide. . . . If this bill provided that on or before a certain date the Mexican money of the Islands should be surrendered and new money issued in lieu of it with some fixed relation of value, and after that date it should be unlawful for other money than that provided in this bill to circulate, and some penalty be attached to its circulation, you might have a uniformity of currency." Cong. Rec., 57th Cong., 2nd Sess., XXXV, Part 2, pp. 2606–07.

[1] Ordinance No. 64 of the City of Manila, dated Feb. 5, 1904 and effective March 1.

Philippine currency. A healthy competition began for the new currency trade. Higgling over exchange rates was reduced, and it was not long before nearly all of the better stores and shops of the city, and many of the poorer ones, were receiving the new Philippine currency at practically the banks' rates, with the result that the introduction of the new currency in Manila was materially accelerated. This expedient, however, was limited to Manila.

Effect of Removing Legal Tender Quality from Old Currency

The public and the local newspapers, for some time prior to the end of the year, held the opinion that the death knell of local currency would be sounded when it ceased to be legal tender on December 31.[1] This popular opinion, however, as was to be expected, was soon to receive a rude shock. From the beginning of the calendar year 1903 up to November each month had witnessed a heavy net exportation of local currency from the Islands. In October, the net exportations amounted to Pfs. 1,500,000. In November, however, the tide began to turn, and between November 1 and February 1 there was a total commercial importation of local currency into the Islands of over Pfs. 1,250,000 and a net importation of over Pfs. 600,000. Nearly P 800,000 of the new currency were withdrawn from circulation during December alone through the sale of exchange by the Government on the Gold Standard Fund in New York, while the month of December exhibited an actual decrease of over P 82,000 in the new Philippine currency circulation. Business concerns which had been announcing for some time their intention to transfer their business to the new currency basis with the opening of the year 1904, when local currency should cease to be legal tender, now reversed their decisions and announced that they would

[1] Cf., for example, editorials on Mexican currency in the Manila Times of Aug. 18, 1903 and Dec. 21, 1903.

be compelled to continue to use the old currency.[1] The following extract from an editorial entitled "The Currency Dilemma" in the *Manila Times* of January 7, 1904 is typical.

"The ordinary individual does not profess to know much about the monetary system of his country. He may distinguish between an undeviating and a fluctuating medium of exchange, but to secure the one and guard against the other has been considered the work of specialists, those who have given the question more than ordinary study. In the hands of experts the uninitiated usually feel safe. So it was with the currency question in this archipelago. The eminent professors and monetary doctors naturally inspired confidence in the people who had suffered much from fluctuating money. Relief was coming because authority that could not well be questioned said it would come. The transformation inaugurated more than half a year ago was to be approximately complete by the first of the present year. The new Conant[2] dollar was expected to take the place allotted to it by statute, while the money that had embarrassed trade conditions would no longer have a place as legal tender. That was all pleasing enough and apparently feasible, but what result did the New Year actually bring? It has brought a realization of the fact that the Philippine Islands are not appreciably nearer the gold standard than they were six months ago; that the new currency when liberated disappears as fast as did any other money representing gold; that the amount of the new currency in circulation is infinitesimal compared with the amount necessary to the usual trade conditions; that the old money is still here and becoming dearer, and further that any person of ordinary intelligence appears to know

[1] Cf. for example the announcement of the Compania General de Tabacos de Filipinas, published in the Manila Times of December 31, 1903.

[2] During the early days the new currency was popularly known as "Conant Currency" in contrast to "Mex". . . Charles A. Conant, it will be recalled, was the currency expert who assisted the Government during the early stages of the formulation of the new currency scheme.

as much about currency as an exact science as those who have been employed for several years to save the archipelago from the mongrel money of the old régime. . . . It certainly seems to a layman, that the new currency system of these Islands is in a precarious condition, . . . [and] it is safe to predict a failure for the new . . . system under present methods."

The situation at the end of the year 1903 was certainly not an encouraging one. The transition period in any currency reform is a period of unsettled business conditions. The Philippines were no exception to this rule, and at the beginning of 1904 gave promise of being a very unfortunate exemplification of it. Business men were anxious to have the transition effected as soon as possible. They were heartily sick of the dual currency and of the generally unsettled business conditions. At the end of the year the prospect of an indefinite prolongment of these conditions was not a pleasant one. The commercial public, however, dreaded any positive action on the part of the Government to put an end to these conditions much as a patient dreads a surgical operation.

Drastic Measures to Force Old Currency out of Circulation

The Philippine Commission, after listening in a number of public sessions to the arguments of the various commercial interests in the Islands — arguments which were in the main directed towards inducing the Commission to redeem all local currency at par, a course many months before definitely decided against, — came to the opinion that the business interests of the Islands would in the long run suffer less, if some positive action were taken by the Government to force the old currency out of circulation with certainty and a reasonable degree of promptness, than if the existing unsettled conditions were permitted to dawdle along indefinitely. The public, it

was reasoned, would continue to use the old currency so long as it was the cheaper one and could be used at a profit in preference to the new; and the prospects were that this condition of affairs would exist for a long time unless the Government should adopt some positive measures to bring it to an end. A few business concerns could not well transfer their business to the new currency basis unless their competitors would do the same — in fact, as we have seen,[1] efforts in this direction on the part of several firms had signally failed, — and it was felt that the Government alone was in a position to force them all promptly into line.

To meet this situation the Government adopted a number of drastic measures. An Act was passed December 28,[2] providing that salaries of provincial and municipal officers and employees should be fixed in Philippine currency at the same amounts then paid in local currency, and that taxes, fees, and other public charges, including fines and penalties, then payable in local currency should be made payable in Philippine currency on the basis of one Philippine peso for one local currency peso; and that all compensation for insular or provincial officers and employees should be payable in Philippine currency, on the basis of one Philippine peso for one local peso, on and after the first of January 1904. By this Act the Government transferred its own business — revenues and salaries — to the new currency on a par basis. Previous executive orders already cited[3] had transferred the Government's contracts and purchasing of supplies to the new basis.

In the fall of 1903 one of the local banks notified its debtors that local currency obligations due the bank at call or maturing before the end of the year must be paid before January 1 or renewed at par in the new Philippine

[1] Supra, pp. 330–31.
[2] Official Gazette, Jan. 13, 1904, p. 17.
[3] Supra, p. 317.

currency. The writer was informed on credible authority that, under the depressed business conditions then prevailing in the Islands, many were unable to settle their obligations before the end of the year, and were therefore compelled to convert them at par, at a loss expressed in gold values of something like 10 per cent.

On January 1, 1904 the Civil Governor issued an order [1] providing for the receipt *and redemption* of Spanish-Filipino currency by the Insular Treasurer and the various provincial treasurers, until July 1, 1904, at such official rates as should be fixed from time to time by executive order. The order further directed that Spanish-Filipino currency should be receivable by the Government in payment of all government dues (but not redeemable in Philippine currency) from July 1, 1904 to October 1, 1904, after which date it was to cease to be so receivable and was to be redeemable, at the option of the Government, only at its bullion value — a value from 8 to 11 per cent less than the bullion value of the Mexican peso.[2] The receipt and redemption of Mexican pesos were officially discontinued January 1, 1904, according to previous announcements. These coins, for which there was a good foreign demand, were left to take care of themselves.

Later in January an arrangement was made by the Insular Treasurer with the three Manila banks which were acting as depositaries of government funds, by which they agreed to withdraw from circulation as far as possible all Spanish-Filipino currency received over their counters, and to repay the Government its local currency deposits solely in the form of Spanish-Filipino currency, as long as the latter should be available. Pursuant to this arrangement a resolution was passed by the Commission on January 28 to the effect that, so long as the Treasurer was able to

[1] Official Gazette, Feb. 10, 1904, pp. 18. Cf. also, Executive order No. 29, June 21, 1904, ibid., p. 527.

[2] Cf. supra, pp. 249–50.

continue this arrangement with the banks, the various provincial treasurers were authorized to "receive Mexican dollars in exchange for Philippine currency at the authorized rate of exchange between Spanish-Filipino coins and Philippine currency, and transmit the coins so received to the Insular Treasury." This measure was continued in effect until July 1, 1904. The arrangement materially assisted the Government in withdrawing the Spanish-Filipino coins from circulation and afforded the public additional means of disposing of their Mexican pesos.

Very tardily, on January 14, 1904, a law was passed prohibiting under heavy penalties "the importation into the Philippine Islands of Mexican currency, Spanish-Filipino currency, or any other metallic currency which is not upon a gold basis." [1] This act was favorably received by the public. Those who viewed it superficially saw in it merely a positive move on the part of the Government toward the solution of the vexed currency problem. "The wiser ones" in the banks and leading business houses saw in it a step which inevitably would force the Government to the policy, previously rejected but which they so much desired, of redeeming the old currency at par in the new. For they saw that to limit the supply of the old currency while it was being retired would force up its value, and, since the public would prefer it to the new currency so long as it was even slightly cheaper, the result would be to force the Government to redeem at par in order to effect its retirement.[2]

[1] Act No. 1042. Official Gazette, Jan. 27, 1904, pp. 79–80.

[2] The Manila Cablenews of January 19, 1904 gave the following interview as "substantially the words of one of the major members of a banking firm when asked what he thought the outcome of the currency situation within the next few weeks would be:"

"Mex. will go to two for one [*i.e.*, Pfs. 2 for $1] in a short time, and people will be fairly breaking their necks to get any of it at almost any price. There are at least eight millions of the precious stuff buried in the Islands here. It has got to come out. All the legislation the Commission can do won't stop it. Somebody is going to make a mint of money. Do you think the bankers

Taxation of the Use of Local Currency. The Government, on the other hand, contemplated no such result. The Act prohibiting the importation of local currency was only part of a larger plan which the Government had been carefully formulating and which involved a much more vigorous step. This was the placing of prohibitive taxes upon the use of local currency after a period of eight months time. When this part of the plan came to light there was a storm of protest.[1] At the public hearings which the Commission held on the subject the members of the banking and business community were nearly all strong in their denunciation of such "drastic and dangerous legislation" as that proposed. The Spanish Chamber of Commerce, the Chinese Chamber of Commerce, and the Filipino Chamber of Commerce, all passed resolutions against the proposed legislation and favoring the retirement of the old currency on a two for one basis.[2] The American Chamber of Commerce after a spirited debate passed a resolution favorable to the proposed legislation, but suggesting certain modifications.[3] "It was apparent," said *The Manila Cablenews*, in its issue of January 22, 1904, referring to the meeting of the American Chamber of

are fools to let such a chance escape them? I tell you the banks are loaded up with Mex., and they will exact payment in full in that currency. The Commission has forbidden the importation of any more of the coins, except what is already on the way, and the people are already clamoring for more than they can get. Already there is not enough of the currency to do business properly on and yet you do not see the Conants in circulation very much. The people want Mex. now, but they will want it very much worse before they can pay the hundreds of thousands of dollars loans they have outstanding with the banks. Mex. is 2.10 to-day, but the result of this forcing process which the banks were foresighted enough to perceive before the prohibition bill was even thought of by the Commission, will simply be that it will go back to two for one in a very short time, and I am not saying but that it may go even higher than that. It depends somewhat on local conditions, but you can be safe in saying it will go to two for one."

[1] Cf. Manila newspapers of Jan. 21 to 24, 1904.

[2] Cf. The Manila Cablenews, Jan. 22, 1904.

[3] Cf. The Manila American, Jan. 21, 1904.

Commerce, "that the consensus of opinion among the commercial men present at the currency session yesterday was strongly opposed to the passage of the proposed Act imposing taxes on contracts, etc. made in Mexican currency. . . ."

Despite the opposition the Philippine Commission stood firm. It gave the appearance of making a few concessions by reducing the rates of the proposed taxes, but, inasmuch as the reductions left the rates all absolutely prohibitive, the concessions were only nominal.

On January 27 the Local Currency Taxation Act[1] was passed. It is one of the most striking pieces of currency legislation in modern currency history. The title declared it to be "an act for the purpose of providing revenue [*sic*] and of maintaining the parity of the Philippine currency. . . ." It imposed an ad valorem tax on contracts or other instruments payable in local currency negotiated after September 30, 1904, and upon local currency bank deposits maintained after December 31, 1904, and exacted a special license tax of all merchants doing business in local currency after the latter date. The tax rates were extremely high and some of them increased automatically with time. For example, the ad valorem rates on checks, notes, drafts, bonds, bills of exchange, and other contracts payable wholly or in part in local currency were as follows: 1 per cent if the contract was made during the month of October, 2 per cent if made during November, 3 per cent if made during December, and 5 per cent if made after December 31, 1904. A transfer of ownership of such documents after September 30, 1904 was to "be considered a separate and distinct contract," and as such to be subject to the tax. The tax rate upon local currency bank deposits held after December 31, 1904 was 1 per cent a month, payable quarterly. In order to reach those who did not make written contracts nor keep bank accounts, the law

[1] Act No. 1045. Official Gazette, Feb. 10, 1904, pp. 105–107.

required "all persons, firms, or corporations who engage in any business whatsoever in the Philippine Islands, after December 31, 1904, and make use of local currency to any extent whatever in either buying, selling, or renting goods, property, or services" to obtain a special license from the Collector of Internal Revenue, in addition to the other licenses then required by law. The license rates were those of the old Spanish industrial tax law which had been repealed by the Philippine Commission. They varied with the size of the city from 500 pesos to 5000 pesos, the rate in Manila being 5000 pesos annually. The penalties for failure to comply with the Act were severe. One member of the Philippine Commission characterized the law as being "horse high, bull strong, and pig tight." Many opponents of the measure thought the Act was so drastic that the Government must be bluffing. They were mistaken.

As a matter of fact the Act was not for two reasons so drastic as it appeared. (1) The first and most important was that the taxation provisions did not begin to become operative for over eight months, *i.e.*, until October 1; and the law did not go into full effect until January 1, 1905. The public were thus given ample time in which to "set their houses in order." If they did not do so they had no one to blame but themselves. (2) The second reason was that numerous exceptions were made for the protection of persons having contracts previously made and payable in local currency, and of persons wishing to dispose of local currency by exportation, sale to the Government, or other similar means. Bank deposits were exempted from the tax when maintained for the purpose of meeting local currency contracts made and properly registered with the Collector of Internal Revenue prior to January 1, 1905. There were careful provisions in the law to secure the equitable adjustment of contracts previously made calling for payment in local currency and maturing after that

currency should cease to circulate. Among the latter provisions there was a somewhat unique one, drafted by the Secretary of Finance and Justice, Henry C. Ide, that merits description.

The Philippine Government apparently had no legal right in its currency legislation to impair directly the obligation of past contracts by denying the legal tender quality to local currency for the payment of contracts made at the time when that currency was unlimited legal tender. Section 3 of the Philippine Coinage Act of Congress contained a proviso that "debts contracted prior to the thirty-first day of December, nineteen hundred and three, may be paid in the legal tender currency of said Islands existing at the time of the making of said contracts, unless otherwise expressly provided by contract." The Philippine Government was now taking action to force all this old currency out of circulation, and it wished persons having such contracts to commute them to the new currency basis at equitable rates of adjustment. To this end the Local Currency Taxation Act (sec. 3) provided that in the case of such contracts the debtor might tender to the creditor in lieu of the local currency called for in the contract, "the just amount due thereon in [the new] Philippine pesos" computed in a manner described. But if the creditor should refuse to accept payment on such a basis, and the right of the creditor should be established in the court, the court was directed to render judgment for the creditor "to recover as damages the lawful sum due to him, in Philippine pesos, instead of in the currency mentioned in the contract . . .", the rate of equivalence being computed in the same manner as it would have been computed had a voluntary commutation been made, according to law, between the debtor and creditor.[1]

[1] For the purpose of computing the just equivalence, evidence was to be taken "as to the real and just value in Philippine currency of the currency named in the contract, . . . including evidence of the local market value of

Immediately upon the passage of the Local Currency Taxation Act, an announcement was prepared by the Chief of the Division of the Currency explaining briefly and in simple language the provisions of existing laws with reference to local currency and urging the public to exchange their local currency for the new Philippine currency as rapidly as possible. This announcement was prepared in 21 different languages and dialects, and nearly 100,000 copies were posted throughout the Islands. It was also widely announced by *bandillo* or "town crier." A second announcement to the same effect was made in November, about 120,000 copies of which, in the various languages and dialects, were posted.

On June 30, pursuant to the executive order of January 1 previously referred to,[1] the Government discontinued the redemption of local currency *as money*, and on September 30 discontinued receiving it in payment of government dues. On September 29 an executive order[2] was issued directing the Insular Treasurer and each provincial treasurer in the Islands to purchase, from October 1, 1904 to January 1, 1905, Spanish-Filipino coins, Mexican pesos, Chinese subsidiary silver coins, and foreign copper coins, at official rates to be announced from time to time by the Civil Governor based upon the *bullion value* of the Spanish-Filipino coins.

The provisions of this order were extended from time to time after January 1, 1905 until July 1, 1907, when practically all the local currency was believed to have been withdrawn from circulation.[3] Spanish-Filipino currency,

such currency, its value in neighboring countries as currency, its value in the great markets of the world, its bullion value, and any other facts necessary to determine its true value." Sec. 3 of Act.

For subsequent judicial applications of these provisions of the Act by the Philippine Supreme Court, see Official Gazette, 1910, pp. 414–15 and 716.

[1] Supra, p. 334.

[2] Executive Order No. 39. Executive Orders and Proclamations Issued by the Civil Governor during the Year 1904, pp. 83–85.

[3] Executive Order No. 8, March 11, 1907. Official Gazette, 1907, p. 190. Cf. Ann. Rep. Treas. Phil. Islands, 1912, p. 33.

although from 8 to 11 per cent lighter than Mexican currency, prior to the time of the above order had always circulated at par with the Mexican currency.[1] Shortly after the issuance of this order, however, as had been expected, the market values of the two kinds of currencies separated, that of the Mexican currency being thenceforth determined by its value for exportation, and that of the Spanish-Filipino currency by the Government's official rate for its purchase as bullion.

Prior to October 1, 1904 contracts to the amount of about 7,400,000 pesos, local currency, exclusive of Government accounts, were registered at the office of the Collector of Internal Revenue, and exempted from the payment of the local currency tax. Of this amount about Pfs. 1,800,000 represented bank deposits, and about Pfs. 3,500,000 insurance policies, payable in local currency. The total number of exemptions issued was 684.[2]

Contrary to the almost unanimous expectation of local bankers and business men, the law providing for the taxation of local currency transactions proved a remarkable success. The dates upon which the various taxes imposed by the law were to become effective were so far distant that the law had little immediate effect. The bulk of the Islands' business continued as before to be transacted in local currency. From January 27, the date of the passage of the Local Currency Taxation Act, until June the value of the Mexican peso in Manila, as measured by sterling exchange rates, was for over four fifths of the time above the value of its silver content in London and above the value of Hongkong currency. During the latter part of April, the month of May, and the fore part of June, the differences in these values were marked, the local value varying during most of this period between 7 and 9 per cent above bullion value, and about the same amount above sterling exchange

[1] Cf. supra, pp. 250–51.
[2] Second Ann. Rep. Chief Div. Curr., p. 14.

rates in Hongkong.[1] Early in June, however, business men began in earnest to adjust their affairs to the law, and it was surprising to every one to see in how short a time the adjustment was accomplished, and with what little disturbance to business. There never was a better example of the adage, "to be forewarned is to be forearmed." From June 9 to June 15 sterling exchange rates in Manila declined nearly $5\frac{1}{2}$ per cent — a variation great in itself, but not at all uncommon in silver standard countries — whereas in Hongkong the decline during the same period was less than one third of 1 per cent. The London price of silver for both dates was the same. This decline was the first sign of any important influence upon exchange rates being exerted by the taxation measures which were soon to go into effect. Sterling exchange rates in Manila, nevertheless, continued above the rates in Hongkong until about the 2d of July. It was not until the 27th of June that the value of the Mexican dollar in Manila fell below the value of its silver content in London. From January to June the net commercial exportations of local currency from the Islands were but 171,000 pesos, in April and May they were but 2100 pesos, in June 55,000 pesos. In July, however, they increased to 837,000 pesos, and for the remainder of the calendar year they amounted to over 5,000,000 pesos. About the middle of June the members of the Manila Chamber of Commerce passed resolutions in favor of transferring their businesses to a Philippine currency basis on the 1st of July, and the Chinese Chamber of Commerce shortly afterwards adopted similar resolutions. By the latter part of July the banks had practically discontinued making forward exchange contracts in local currency, and comparatively few ready transactions in that currency were then being made. Before August 1 the great bulk of the foreign exchange business of the Islands had been transferred to the new currency basis. Between

[1] Ibid, p. 28. Cf. also chart, supra, p. 251.

August 31 and December 31 the total local currency current-account credit balances (exclusive of Government balances) of the five Manila banks fell from 1,814,474 pesos to 729 pesos. By September 30, the date upon which the taxation of local currency transactions began to go into operation, most of the larger trade of the Islands was being carried on in Philippine currency, and the same was true of the better class of retail trade. The small transactions of the Chinese and native shops and of the markets still continued to be almost entirely in local currency.

With the beginning of the new year the Collector of Internal Revenue, in whose hands the administration of the Local Currency Taxation Law was placed, issued circulars to his deputies throughout the Islands enjoining the rigid enforcement of the law. The circulation of local currency among the small trades-people quickly ceased; thousands of natives and Chinese flocked to the insular treasury and the various provincial treasuries for the exchange of their old currency. The exchanges made by the Government during December, January, and February, amounted to several millions of pesos, a large proportion of which was composed of subsidiary and minor coins, the denominations naturally last to be presented for redemption.

On February 2, 1905 the Collector of Internal Revenue sent a circular letter to all the provincial treasurers in the Islands, inquiring to what extent local currency was being used in the business of the respective provinces, and to what extent it was being held for speculative purposes. Reports received from thirty-four provinces showed that in all but three provinces local currency had practically ceased to be used except to a small extent in a few of the more remote parts of the interior, and that almost none was being held for speculative purposes. Of the three provinces excepted, the estimated circulation in two of them was but 135,000 pesos, while for the third one, a remote province

of little commercial importance, no estimate was made. After January 1905 local currency ceased to be a factor in the trade of the Islands except to a small extent in a few very remote districts. Only three persons were prosecuted for the infraction of the Local Currency Taxation Law, and all three cases were of minor importance.

Effect of the Reform on Prices

An important question to be asked in connection with any currency reform is, What was its effect upon prices? Unfortunately, the absence of any carefully prepared price statistics in the Philippines renders a safe judgment upon this question impossible. What evidence there is seems to show that the immediate tendency of the change was to give the new peso no higher purchasing power as regards retail prices and wages than the old, and thus to increase prices and wages, as measured in gold values, by the difference between the gold value of the new monetary unit and that of the old.[1] This tendency apparently did not apply to anything like the same extent in the case of wholesale prices, with reference to which competition was much keener. Under the old currency régime the purchasing power of the local peso in local retail trade was not to any extent altered by short-time fluctuations in the value of its fine silver content. A Mexican peso would ordinarily purchase as much in the local retail markets when its bullion value was forty cents, United States currency, as when it was forty-five or fifty cents. It has previously been noted that at the beginning the new peso was generally accepted by local tradesmen only at the same value as the old. As the new money worked its way into more general circulation, however, merchants in Manila and other cities of the Islands came

[1] In this respect the experience of the Philippines seems to have been similar to the recent experience of Porto Rico already discussed. Supra, pp. 213–23.

more and more to allow a premium on the new currency, varying in amount up to the banks' purchasing rate for the same as a maximum. Later, when the new money came to constitute the main part of the circulating medium, prices seem to have been transferred quite generally from the old currency to the new without any material alterations, and in that case local currency, when received at all, was received at a discount. It should be added, moreover, that, at the time this influence was making itself felt in the direction of an advance in prices and wages, the tendency of local prices appears to have been downward.

Results Summarized

The results accomplished down to the spring of 1905 may briefly be summarized as follows. For the twenty months from August 1, 1903 to April 1, 1905 there was a net exportation of local currency from the Islands amounting to approximately 26,000,000 pesos,[1] about 12,000,000 of which were commercial exportations, and 14,000,000 government shipments for the purpose of recoinage. The first shipment of local currency by the Government for recoinage was made in November 1903. The new currency, as previously stated, began to be placed in circulation the latter part of July 1903. The circulation, as estimated by the writer, at the end of each quarter from the passage of the Gold Standard Act to April 1, 1905 was as follows:

	Pesos.
December 31, 1903	3,910,000
March 31, 1904	7,402,000
June 30, 1904	9,057,000
September 30, 1904	14,254,000
December 31, 1904	20,766,000
March 31, 1905	27,045,000[2]

[1] From January 1, 1903 to August 1, 1903 there was a net commercial exportation of about 11,400,000 pesos.

[2] The note issue of the Spanish-Filipino Bank, amounting to between a million and a half and two million pesos, was during the same period, January 1904 to March 1905, transferred to a Philippine currency basis.

By April 1 local currency had been practically eliminated from circulation, and the Islands were firmly established upon a gold basis. In other words, with the exception of the small amount of United States currency in circulation, practically the entire currency of the country was transformed in a little over a year and a half's time, and that without serious derangement of business and probably with no greater disturbance to prices than frequently occurred under the pre-existing silver standard as the result of fluctuations in the value of silver. Every one was relieved that the reform had been so quickly and so successfully accomplished; and prospects were bright for a long period of freedom from currency disturbances. Very soon, however, a new difficulty appeared, growing out of the startlingly rapid rise in the price of silver.

CHAPTER VII

DANGER TO THE NEW CURRENCY FROM THE RISE IN THE PRICE OF SILVER[1]

FROM 1872 until 1903 the gold price of silver had tended strongly downward — a fact made familiar to all by the bimetallic controversy. The average annual price of British standard silver in London fell from $60\frac{5}{16}d.$ per ounce (a ratio with gold of 15.63 to 1) in 1872 to $24\frac{3}{4}d.$ (a ratio of 38.10 to 1) in 1903, a decline having taken place in twenty-two of the thirty-one years. In only one month, October 1900, the time of the adjustment of the Boxer troubles in China, had silver been above 30*d.* since November 1896,[2] and the opinion had become quite general that silver had "come down to stay." There was much talk of the probabilities of a further decline; very little of the probabilities of a rise. The Mexican Commission on International Exchange, treating the subject of silver in one of a series of valuable papers submitted to the British Commission in June 1903,[3] said, after outlining

[1] The next sixteen pages of this paper are based largely upon an article by the author on The Recent Rise in the Price of Silver and Some of its Monetary Consequences, published in the Quarterly Journal of Economics for February 1912, pp. 215–74. It is used with the permission of the publishers, for which grateful acknowledgment is made.

[2] The figures for the price of silver are those for British standard silver in London as given in the annual circulars of Pixley and Abell, bullion brokers, London.

For a brief general history of silver the reader is referred to Paul George, Die Bewegung des Silberpreises seit 1873.

[3] The papers are given in English in the 1903 Report of the Commission on International Exchange, on Stability of International Exchange, pp. 173–96.

the more important events in the recent history of silver: ". . . All of these events have made such a deep moral impression that at present silver is a subject of very little or no importance whatever to the business community of the two continents, and it is almost a disagreeable topic of conversation." [1]

A glance at the chart on page 353 will show the movement of the price of silver by months for the period from September 1904 to December 1907 inclusive.

The average annual price, which was $24\frac{1}{16}$*d.* in 1902, rose to $24\frac{3}{4}$*d.* in 1903, $26\frac{3}{8}$*d.* in 1904, $27\frac{13}{16}$*d.* in 1905, and $30\frac{7}{8}$*d.* in 1906. Silver reached $30\frac{1}{4}$*d.* an ounce in November 1905, for the first time since October 1896, while the high price of November 1906, *i.e.*, $33\frac{1}{8}$*d.*, was the highest price between October 1893 and April 1916.[2] For the period 1903 to 1906 inclusive the range was 52.7 per cent, that is, from $21\frac{11}{16}$*d.* (January 1903) to $33\frac{1}{8}$*d.* (November 1906). The low point in the price of silver having been reached about the end of 1902, the upward movement began the fore part of 1903, continuing, although with frequent interruptions, until November 1906. A high level was then maintained until the great slump in the autumn and early winter of 1907.[3]

With the causes of this great and unprecedented rise in the price of silver we are not here concerned. The reader interested in that subject will find it discussed in some detail in the author's article, above cited, on *The Recent Rise in the Price of Silver and Some of Its Monetary Consequences*.[4]

[1] Ibid., p. 190.

[2] Figures here cited for the high and low prices were taken from the Pixley and Abell circulars; those for monthly averages were taken from the United States Director of the Mint Reports.

[3] During the fore part of 1916, as this book is going to press, a pronounced rise in the price of silver is taking place. Silver reached the high point of $37\frac{1}{2}$*d.* on May 3.

[4] Pages 220–39.

At the price of $29\frac{1}{4}d.$ per ounce for British standard silver (and $64\frac{1}{8}$ cents for fine silver in the United States) the newly introduced Philippine pesos, likewise the new subsidiary coins, would have reached their bullion par and consequently have been in danger of the melting pot. The weight assigned to the peso in the bill prepared by the Philippine Commission with the assistance of Mr. Conant and introduced in both houses of Congress, January 7, 1902, had been 385.8 grains of silver .835 fine.[1] That peso, having a fine silver content about 14 per cent less than the one later authorized, would have had a bullion par of 34*d.* per ounce for British standard silver in London, and consequently would not have reached the melting point, since the highest price reached was $33\frac{1}{8}d.$ per ounce, in November 1906. At the average price of silver for January 1902 the 385.8 grain peso of the original bill would have been worth as bullion 41 cents; but a year later its average bullion value for January would have been only 35.2 cents;[2] and this appeared to give too great a margin between bullion value and money value, especially since the tendency of the price of silver seemed to be strongly downward. Accordingly, the Senate Committee increased the weight of the peso to 416 grains and the fineness to .900. By January 1903 silver had fallen so far that the average price gave this 416 grain peso a bullion value about 8 per cent less than that of the lighter weight peso of the original bill a year before.[3] The margin between the bullion value and the money value of the 416 grain peso, at the average price of silver for February,[4] was about 32.4 per cent, which to most people seemed to be a generous margin of safety.

[1] Cf. supra, pp. 308–309.
[2] Cf. supra, p. 251.
[3] Cf. supra, pp. 308–309.
[4] The Philippine Coinage Act was passed March 2, 1903.

Export Point of New Silver Coins

When it is said that the bullion par of the new peso was $29\frac{1}{4}d.$ per ounce for silver in London, it does not mean that at this price Philippine silver coins would have been melted and exported. To find the actual export point a number of other factors, all of them more or less variable, need to be taken into account. The chief of these were the following.

(1) The destination of the silver. If it were London, the silver could not be laid down there normally in less than forty days from the date of shipment, while actual delivery could not be made for several days more, because of the time required for smelting, refining, and putting into bars. If the silver were to be shipped to London, therefore, the determining rate would not be the prompt price, but the price for forward delivery. If, on the other hand, it were to be used as bullion in Hongkong, and did not require first to be shipped to London, it might bring a price as bullion higher than the prompt price in London by an amount sufficient to cover the difference between the expenses of shipping (inclusive of interest) from London to Hongkong, and those from Manila to Hongkong.

(2) The expense of shipping. Silver coins to be exported must be sorted, boxed, insured, carted, shipped, unloaded, and delivered. In some instances brokerage commissions must be paid. The total expense of shipment cannot be stated exactly, because it varies from time to time, and because banks frequently have special contract rates for shipping treasure. One per cent was probably a safe computation at the time for such expenses on substantial shipments to London, and $\frac{1}{4}$ of one per cent on such shipments to Hongkong.

(3) Exchange. If exchange on the place of destination were low, the exporter of silver would receive an additional profit; if it were high, his profit would be dimin-

ished. An important element in the quoted rate of exchange in a country so distant from the great financial centers of the world as the Philippines is the item of interest.

(4) Metallurgical expenses. These included the expenses of melting, refining, alloying, and putting into bars.

There were in addition numerous other factors which had to be taken into account, as, for example, the abrasion of the coins (a very small item in this instance), the firmness of the silver market, and the method of payment at the place of destination.

Taking all of these factors into consideration, it seemed improbable that the shipment of Philippine silver coins to London as bullion would become profitable before forward silver (sixty days) reached $30\frac{1}{4}$ to $30\frac{1}{2}d$. It was to be considered, however, that circumstances might exist such as to make shipping profitable even below 30*d.*

There was another important phase of the problem, however, which does not appear to have been generally understood. It was the possibility that Philippine coins might be exported not as bullion but as money — a possibility which became a reality the following year.[1]

The circulating medium of Hongkong, Shanghai, Tientsin, Pekin, and other oriental cities contained many different kinds of silver "dollars." In these cities Mexican dollars, old and new, British dollars, old Hongkong dollars, and several kinds of more recent Chinese dollars passed current, usually at different rates when paid in substantial quantities. In Hongkong, for example, the unit of account is commonly the so-called "Hongkong currency," that is, the bank notes of two large banking institutions. These notes are redeemable in "chopped"[2] dollars which when paid in large quantities

[1] Infra, pp. 355 and 363.

[2] A large proportion of the dollars in circulation in Hongkong are defaced by "chopping" with a metal hammer, the object of the chopping being to test the coins as to their genuineness.

usually pass by weight. In Canton and other places near Hongkong, the chopped dollar usually commands a slight premium in "Hong Kong currency"; the new Mexican dollars nearly always command a premium; Mexican dollars of the old die command a still larger premium, frequently from three to four per cent; likewise British dollars. In November 1905 a premium of $3\frac{1}{2}$ per cent was quoted in Hongkong for the British dollar, and it was said that the million or more new Straits Settlements dollars that were exported from Singapore before exportation was prohibited had found their way largely to Hongkong [1] and there commanded the same premium as the British dollar with which they conformed in weight and fineness.

With the close proximity of the Philippine Islands to Hongkong, and the large Chinese population in the Islands, it did not seem improbable that Philippine pesos might be shipped as money to Hongkong and there pass current, or at least prove acceptable as bank reserves. Certainly, if they would not be received at a premium as "clean" dollars, they would readily be received if they should lose their identity by being "chopped." [2]

The total expense of shipping Philippine silver coins from Manila to Hongkong, it was estimated, would not exceed $\frac{1}{4}$ of one per cent. Interest charges and the item of exchange were almost negligible. There would, moreover, be no charges for melting, refining, etc. The situation may be illustrated by an example. Sterling telegraphic transfers in Manila on November 9, 1905 were quoted at $20\frac{3}{16}d.$ and in Hongkong at $20\frac{1}{4}d.$ One fourth of one per cent would have covered all charges of shipping Philippine coins to Hongkong on that date. Therefore if Philip-

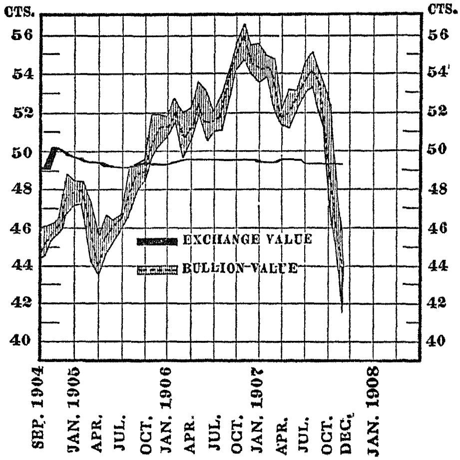
[1] Cf. infra, pp. 404–405.

[2] The "chopped" dollar in Hongkong, as measured by sterling exchange, often varied several per cent on either side of the value of its silver content in London. Cf. Sec. Ann. Rep. Chief Div. Cur. Phil. Islands, pp. 23–8.

pine pesos had commanded the same premium in Hongkong that British dollars and Straits Settlements dollars of exactly the same weight and fineness are said to have commanded, *i.e.*, $3\frac{1}{2}$ per cent, there would have been a net profit on exportation of about 3 per cent, although the exportation of Philippine coins to London as bullion on that day (the prompt price of silver having been $29\frac{1}{16}$*d.*) would have involved the exporter in a loss.

The situation in the Philippines was further complicated by the fact that the supply of pesos in the treasury vaults available for increasing the circulation was low, and there were prospects that the Government would soon be called upon, under the principles of the gold-exchange standard, to purchase silver bullion for further coinage.

EXCHANGE VALUE AND BULLION VALUE OF PHILIPPINE PESO UNDER ACT OF 1903



The accompanying chart shows the fluctuations in the exchange value of the peso, as measured in monthly cable-exchange rates in Manila on London (reduced at par exchange between New York and London to United States currency equivalents), and in its bullion value at the current price of British standard silver in London. The figures are monthly averages.[1]

[1] The figures for this chart were computed from the records of the Manila branch of the Hongkong and Shanghai Banking Corporation, and from the annual compilations of the Director of the Mint.

Measures taken to Prevent New Silver Coins from being Melted or Exported

On November 6, 1905 the price of silver in London passed the 28*d.* mark (reaching $28\frac{1}{8}d.$), and the Philippine Government began to consider measures to protect its currency. An Act was passed November 17, to take effect immediately, prohibiting the exportation of Philippine silver coins or of bullion made by melting or otherwise mutilating such coins.[1] The Act provided that any such silver coin "which is exported, or of which the exportation is attempted . . . shall be liable to forfeiture under due process of law, and one third of the sum or value of the bullion so forfeited shall be payable to the person upon whose information, given to the proper authorities, the seizure of the money or bullion so forfeited is made. . . ." It was further enacted that to export or attempt to export such coin or bullion shall be "a criminal offence, punishable, in addition to the forfeiture of said coins or bullion . . . by a fine not to exceed ten thousand pesos, or by imprisonment for a period not to exceed one year, or both, in the discretion of the court." This law suggests some of the currency laws of the seventeenth and eighteenth centuries in Europe which were inspired by the economic philosophy of the Mercantilists. Its *raison d'être*, however, was far different. It was looked upon merely as a temporary and emergency measure, and the authorities fully appreciated that if the profits realizable on illicit exportation should become very large, no penalty however severe could prevent smuggling. Many thought that the price of silver had already reached its maximum. At any rate the Philippine Government would have to await the action of Congress for authority to recoin.

The Act prohibiting the exportation of silver coin and bullion proved effective for some time, and not until the

[1] Act No. 1411. Official Gazette, Nov. 29, 1905, p. 659.

summer of 1906 was there any evidence that it was being evaded to any extent. On May 23, 1906 silver in London was quoted at $31\frac{3}{8}d.$ or 7.3 per cent above the bullion par of the Philippine peso; there was then a slight reaction through August, but on September 24 the price reached $31\frac{3}{4}d.$ or 8.5 per cent above bullion par, on October 27 $32\frac{9}{16}d.$ or 11.3 per cent above bullion par, and on November 17 $33\frac{1}{8}d.$ or 13.2 per cent above bullion par. This last price represents the maximum price of silver from October 1893 to the recent rise in the spring of 1916, during which it reached $37\frac{1}{2}d.$ on May 3. Reference to the chart on page 353 will show that the *average bullion value* of the peso rose from 44.1 cents in April 1905 to 50.3 cents in November, 51.2 cents in December, and 52.1 cents in February 1906; it then fluctuated irregularly, reacting to 50.1 cents in July, and then rose rapidly, reaching a maximum of 55.9 cents for November. It then declined to 51.7 cents in March, reacted to 54.2 cents in August, and after that declined rapidly. The gold value of the peso as money, expressed in sterling cable rate equivalents, was nearly constant during the entire period, the range being from 49.18 cents to 49.56 cents, or 0.8 per cent. At such silver prices the profits realizable upon exportation were so large that it is not surprising that there was some smuggling when one bears in mind the peculiar character of the Philippine coast line. Notwithstanding the rigor of the law prohibiting the exportation of silver coins or bullion obtained by melting them, and the extreme vigilance exercised by the Government, it is estimated that between P 500,000 and P 1,000,000 were exported, all of it probably going to China. In fact the head-office of the Hongkong and Shanghai Banking Corporation at Hongkong was reported to have held in its vaults at one time as much as P 400,000.[1]

[1] Cf. Ann. Reps. Treas. Phil. Islands, 1907, p. 20; 1912, p. 34, and 1913, p. 35; for varying estimates.

In addition to the law prohibiting the exportation of silver, other temporary measures were soon taken to enable the Government to meet the increasing demand for currency without the necessity of suffering the losses which would result from the buying of silver for further coinage at prices above bullion par. Had exchange in New York on Manila at this time gone to the currency-export point under the gold-exchange standard, and had peso drafts on the Gold Standard Fund in Manila been purchased in considerable quantities from the Government's Gold Standard Fund agent in New York, the Philippine Government would have found itself in the awkward position of trying to maintain single handed a system of currency that, in effect, would have been national bimetallism at a ratio of 32.25 to 1 — a ratio greatly undervaluing silver.[1] The Government's telegraphic transfer rate for the sale of Gold Standard Fund drafts in Manila on New York was temporarily reduced by an order of March 15, 1906[2] from $1\frac{1}{8}$ per cent to $\frac{3}{4}$ of one per cent, a procedure of very dubious advisability under the principle of the gold-exchange standard, and one which gave little if any actual relief.[3] United States paper money still circulated in the Philippines and the Government resorted to its more extensive use. With this object the sum of $1,850,000 of United States currency belonging to the Philippine Government and on deposit in New York was ordered shipped to Manila in the spring of 1906.[4]

Substitution of Gold for Silver as Part of Certificate Reserve

A measure of more permanent importance, calculated not only to meet the demands of the time for more pesos,

[1] Supra, pp. 318–22.
[2] Administrative order, No. 3. Official Gazette, Mar. 28, 1906, p. 185.
[3] Cf. Ann. Rep. Treas. Phil. Islands, 1906, p. 14.
[4] Ibid.

without the necessity of further purchases of silver bullion, but also to render the Philippine Government more independent of the silver market in the future, was the one recommended by the Philippine authorities to the United States Congress with reference to the silver certificate reserve. Philippine silver certificates were issued on the same plan as are silver certificates in the United States, being backed peso for peso by silver coin in the silver certificate reserve. The plan had been adopted for the Philippines by Congress in the Philippine Coinage Act of March 2, 1903, and was subject to amendment only by Congress. In June 1906 there was in circulation approximately P 10,500,000 of silver certificates, representing an equal amount of silver pesos in reserve. At the same time there was in the Philippine treasury, as there had been for a number of years, several million dollars of United States gold coin, which had been shipped to the Philippines for purposes of United States army and navy disbursements, and which were not acceptable as a circulating medium in the Islands, since gold coins when paid out promptly disappeared into hoards or were exported. The plan recommended by the Philippine Government and adopted by Congress in the Act of June 23, 1906 was this: the Treasurer of the Philippine Islands, with the approval of the Governor-General, was granted authority to substitute, for any part of the silver pesos thereafter deposited in the silver certificate reserve, gold coin of the United States (which was unlimited legal tender in the Philippines at the rate of a dollar for two pesos) and to redeem the certificates thereafter issued in either silver pesos or gold coin of the United States at his option; provided that the amount of gold coin held in the reserve should not at any time exceed sixty per cent of the certificates outstanding. The authority thus given was immediately utilized by the Philippine Government, and the contract upon the certificates was so altered as to make them payable in silver

pesos or gold coin of the United States at the option of the Philippine Government.

This action was difficult for many people in the United States to understand, since it represented such a reversal of our own currency experiences. Silver coin in the Philippines had proven too valuable because of the appreciation of silver and, in order to avoid the necessity of purchasing more silver bullion at the time and to prevent the silver certificates from appreciating above the standard unit of value (*i.e.*, 12.9 grains of gold .900 fine or the equivalent of $0.50 in gold), the certificates were made payable in the future, at the option of the Government, in the *cheaper money*, *i.e.*, gold coin.

CHAPTER VIII

THE RECOINAGE

THE measures thus far taken offered only a partial solution of the problem. Most of the outstanding silver certificates still bore on their face a promise to pay in silver, and nearly two thirds of the money in circulation in the Islands was silver coin worth much more as bullion than as money, *if it could only be gotten out of the Philippines.* Obviously a recoinage of this money into coins of a smaller fine silver content was imperative. Authority to recoin was sought of the United States Congress, and Congress responded promptly in the Act of June 23, 1906, which left the matter of recoinage very largely to the discretion of the Philippine Government.

Section 1 of this Act provided

"That, with the approval of the President of the United States, the Government of the Philippine Islands is . . . authorized . . . to change the weight and fineness of the [Philippine] silver coins, . . . and may in its discretion provide a weight and fineness proportionally less for subsidiary coins than for the standard Philippine pesos, and may also . . . recoin any of the existing coins of the Philippine Islands at the new weight and fineness when such coins are received into the treasury or into the Gold-Standard Fund of the Philippine Islands: *Provided*, that the weight and fineness of the silver peso to be coined . . . shall not be reduced below seven hundred parts of pure silver to three hundred parts of alloy."

Congress, accordingly, placed no restriction upon the weight of the new coins and practically none upon the fineness,

since no one thought of adopting a fineness lower than .700 for any of the silver coins.

The problem of deciding to what extent and in what manner the fine silver content of the coins should be reduced was not an easy one. Certain technical requirements of coinage obviously must be met, so that the coins would be satisfactory in wearing qualities and in appearance. In addition the new coins must meet three important conditions. (1) They must be reduced in fine silver content sufficiently to remove the danger of their being driven to the melting pot. But how could this be done unless one could foresee the future price of silver? When Congress passed the Philippine Coinage Act, March 2, 1903, we have seen, it allowed a margin of 32.4 per cent,[1] which was believed by nearly every one to be ample. That margin had now been used up and 13 per cent more,[2] by the advance in silver. Some persons well informed with regard to the silver market were predicting a continued rise in silver until the time-honored ratio of $15\frac{1}{2}$ to one should again be realized. Clearly the history of the price of silver during the immediately preceding years did not justify much confidence in prophesies concerning its future. (2) The second condition was that the coins should not be so reduced in weight as unduly to encourage counterfeiting.[3] (3) The other condition was that the coins should not be reduced so much in weight as to endanger their acceptability by the people as equivalent to the existing larger weight coins. The natives would naturally be suspicious of any reduction in the size of the coins so soon after the existing Philippine coins had been put into circulation at a premium over the old silver standard coins for which they were forcibly exchanged and with which they had been long

[1] This figure is derived by comparing the bullion par of the peso, 29*d.* per ounce, with the average price of silver for February 1903, *i.e.*, $22\frac{8}{32}$*d.*

[2] Cf. supra, pp. 353 and 355. This percentage is computed from the maximum price of silver in 1906, *i.e.*, $33\frac{1}{8}$*d.* on November 17.

[3] Cf. supra, p. 305.

familiar. It is true they were accustomed to monetary changes and to light weight silver coins circulating at a par with heavier coins.[1] Unfortunately, however, many of them were suspicious of the American Government, and there were not wanting those, especially Chinese money changers, who would gladly exploit their ignorance and distrust.

After these various factors were weighed, it was decided that the wisest plan, in spite of the risks of experiencing some temporary difficulties in putting the new coins into circulation, was to make a very substantial reduction in both the weight and fineness of all the silver coins. The gross weight of the peso was accordingly reduced from 416 grains to twenty grams (*i.e.*, 308.66 grains), and the fineness from .900 to .800, thus reducing the fine silver content of the peso by 34 per cent, and changing the ratio with gold from 32.25 to 1 to 21.3 to 1. With this ratio the new peso cannot be in danger of the melting pot until silver reaches approximately $44\frac{3}{8}$*d.*, and before that time both the Indian rupee (with its ratio to gold of 21.9 to 1) and the Japanese silver coins (with their ratio of 21.6 to 1) will have passed the bullion par. The Philippine peso, therefore, is well protected by the large silver circulation of these two countries.

The recoinage law made the silver subsidiary coins exactly proportionate in weight to the peso, but reduced their fineness from .900 to .750. Having a larger percentage of alloy than the peso, these subsidiary coins cannot reach their bullion par unless the price of silver rises to $47\frac{1}{2}$*d.* (giving a ratio with gold of 19.9 to 1). Long after the peso would go to the melting-pot, the subsidiary coins would remain in circulation; and to orientals the half-peso is usually as popular a coin as the peso. In Spanish times the half-peso was unlimited legal tender.

Shipments of the old coins to the United States mints

[1] Supra, pp. 246–53.

for recoinage began December 15, 1906.[1] By the end of the fiscal year 1911, P 29,498,569 out of a total of P 32,779,282 had been returned to the mint for recoinage.[2] Since that time they have been coming to the government treasuries in small quantities every year and been shipped to the United States for recoinage.[3]

Putting the New Coins into Circulation

The first consignment of the new coins arrived in Manila on May 4, 1907, and the operation of placing the new money in circulation was commenced immediately. A provision in the Philippine Recoinage Act of December 6, 1906 required, for the purpose of expediting the ready circulation of the new coins, that the Treasurer should prepare an explanatory circular which should be translated into the various languages and dialects of the Philippines and be distributed throughout the Islands. This circular should "explain the reason for the recoinage" and should "inform the public that the new coins will be received in payment of all taxes and government dues, and will be legal tender for private debts as the equivalent of the old coins; that they will be receivable in Manila for the purchase of gold drafts on the same terms as the old coins, and that they may be exchanged on demand at the insular treasury in Manila and at various provincial treasuries throughout the Islands for silver certificates, and if desired for nickel and copper coins." Such a circular was prepared and translated into Spanish, Chinese, and eleven

[1] Report of the Treasurer of the Philippine Islands, 1907, in Report of Philippine Commission, 1907, Part III, p. 68.

[2] Ann. Rep. Treas. Phil. Islands, 1911, p. 24.

[3] Just as this is going to press it is announced that as a result of the great rise in the price of silver in the spring of 1916 and of India's heavy demand for the white metal, many Philippine pesos of the first American coinage have found their way into India and been melted down for the coinage of rupees. National City Bank of New York, Circular Letter of June 1916, p. 5.

native dialects and distributed throughout the country. "In addition, all provincial treasuries were directed to carry on a general campaign of education in order that . . . [the people] might become thoroughly acquainted with the new currency and the reasons for the change in its weight and fineness." [1]

At first, as was anticipated, there was some discrimination against the new coins, particularly in the interior of the country. From some sections reports were received that Chinese traders would not receive the new coins in business transactions except at a discount varying from 20 to 40 per cent, and that they were offering as high as 5 per cent premium in the new coin for the old. The educational campaign, carried on by the Government and by the banks, however, coupled with the fact that the new silver coins were readily interchangeable at government treasuries throughout the Islands for silver certificates and nickel and copper coins with which the people were familiar, soon broke down all discrimination, and by October 15, 1907 the new coin was "accepted without question in every part of the Islands, and no reports or complaints have been received for the past two months as to discounting, and so far as can be ascertained no premium is now paid for the old coin." [2]

Domestic Drafts Sold by Government

Shortly after the recoined money began to be put in circulation, the Philippine Government passed an Act intended to expedite the introduction of the new coins and to facilitate the ready adjustment of the currency supply to local needs.[3] This Act authorized the Insular Treasurer to sell demand drafts and telegraphic transfers in sums of not less than P 500 upon funds in the hands of provincial treas-

[1] Ann. Rep. Phil. Com., 1907, Part III, p. 68. [2] Ibid., pp. 68–69.
[3] Act No. 1636 of April 30, 1907. Official Gazette, 1907, p. 305.

urers, whenever such sales could be made without embarrassment to the insular treasury. The purchase money was to be credited on the books of the insular treasury to the provincial treasurers. Under similar conditions the various provincial treasurers were authorized to sell demand drafts and telegraphic transfers upon funds to the credit of their respective provinces in the insular treasury, and upon other provincial treasuries. The premiums for these exchanges were to be fixed from time to time by the Secretary of Finance and Justice.

There were some delays[1] in putting the system into effect, and the exchanges were not in full operation until March 1908. The rates fixed by the Secretary of Finance and Justice, which were made uniform throughout the Archipelago, were one fourth of one per cent for demand drafts, and one fourth of one per cent plus all telegraphic charges for telegraphic transfers — rates which obviously favored telegraphic transfers by an amount nearly equal to the interest during the period required for the transmission of demand drafts.[2] These rates were materially cheaper than the expense of shipping currency by express, and the Government's transfer system was promptly taken advantage of by merchants and individuals, substantial amounts being transferred both to and from Manila, and some between the provinces.[3]

[1] Ann. Rep. Treas. Phil. Islands, 1908, p. 20.

[2] This advantage was often trivial because for small transfers the cost of the telegram was not negligible, although a code was regularly used. Furthermore, there were frequent interruptions in the telegraph service to certain provinces and often long delays in the transmission of telegrams.

[3] The total transfers so far reported by fiscal years are given below, by far the larger part being by telegraph:

1908 . . .	P 449,502 (3 months only)
1909 . . .	1,480,971
1910 . . .	2,556,599
1911 . . .	2,573,193
1912 . . .	3,086,129
1913 . . .	2,673,787

The decrease in 1913 is said to be due to the increasing use of checks on the recently established agencies of the Philippine Agricultural Bank.

CHAPTER IX

The Gold Standard Fund since the Recoinage of 1906–1909

Incidental to the work of protecting and improving the Philippine coinage system by the recoinage the Government realized a very substantial profit. The new pesos contain only about 66 per cent as much pure silver to the peso as the old, and the new subsidiary coins only about 62 per cent. If all the old coins were recoined into coins of the same denominations, which was approximately what was done, there would have resulted a gross profit of about P 17,450,000, provided of course there were need of the additional coins for monetary purposes, as was the case.[1] At the end of the fiscal year 1913 there remained unaccounted for of the first Philippine coinage (in round numbers) P 2,676,000, of which P 1,856,000 or 69 per cent consisted of pesos and P 820,000 or 31 per cent of subsidiary silver coins.[2] These coins for some years to come will undoubtedly continue to flow slowly into the treasury and to be recoined. Some of them — no one knows how many [3] — were smuggled out of the Islands in 1906 and 1907 when on account of the rise in silver[4] they were worth more for

[1] The amount of Philippine currency, exclusive of bank notes, in circulation in the Islands increased from P 30,030,000 June 30, 1906 to P 46,601,000 June 30, 1913. Ann. Rep. Treas. Phil. Islands, 1913, p. 38.

[2] Ibid., p. 35.

[3] The Philippine Treasurer in his 1907 Report (p. 20) estimated the amount at between P 750,000 and P 1,000,000; in his 1912 Report (p. 34) he estimated the amount outside of the Islands at at least P 503,000; and in his 1913 Report (p. 35) at at least P 676,000.

[4] Supra, pp. 355 and 363.

export than for home circulation. If we assume the amount outside of the Islands in 1913 to have been P 600,000, all in the form of peso pieces — probably the only form in which the money was exported — and if we assume that none of it will be smuggled back,[1] the gross profit on the recoinage would be reduced to P 17,141,000. From this sum must be deducted an amount sufficient to cover the expenses chargeable to the recoinage — expenses of withdrawing approximately P 30,000,000 of old coins from circulation, of shipping them to the San Francisco mint, melting, refining, recoining, and shipping back to the Philippines. For most of these items figures are not available; but basing conclusions upon such data as are available for this recoinage and for the coinage of 1903, we are probably on the safe side in allowing five per cent upon the recoinage to cover all expenses. Five per cent upon the recoinage of P 46,000,000 is P 2,300,000, which deducted from the P 17,141,000 gross profits on recoinage leaves P 14,841,000 as the net profit on recoinage — a sum equal to approximately 32 per cent of the entire Philippine circulation (P 46,600,000 exclusive of bank notes) at the end of the fiscal year 1913. Under the provisions of section 1 of the Philippine Gold Standard Act,[2] this entire profit inured to the Philippine Gold Standard Fund, "a separate and trust fund in the insular treasury, . . . to be used for the purpose of maintaining the parity. . ." of the Philippine currency with the gold unit of value. But, with this large addition, the Gold Standard Fund, which at the end of the fiscal year 1906 amounted to P 5,669,000[3] or 19 per cent of the entire circulation, became unreasonably large.

[1] The smuggled pesos apparently went mostly to Hongkong and there were used in bank reserves as money. The great rise in the price of silver in 1916 drove many of them to the melting pot. It has already been noted that considerable quantities were melted down for rupee coinage in India in the spring of 1916. See supra, p. 363.

[2] Supra, p. 318.

[3] Ann. Rep. Treas. Phil. Islands, 1906, p. 12.

At the end of the fiscal year 1911 it amounted to P 20,620,000,[1] or 43 per cent of the entire circulation.[2]

Size of Gold Standard Fund

A 43 per cent reserve, increasing each year through the premiums on Gold Standard Fund exchange,[3] is obviously more than was needed for the maintenance of the parity. This is true despite the fact that the extreme variations that sometimes take place in the currency needs of the Islands make necessary a large Gold Standard Fund. There have been two examples of these extreme variations since the American occupation. The first was in 1903 when, largely as a result of the failure of the Philippine rice crop, there was a net commercial exportation from the Islands of about 15,000,000 local pesos, out of a total circulation certainly not exceeding 50,000,000 pesos.[4] A recurrence of such a slump in the currency needs would obviously make a tremendous demand upon the Gold Standard Fund in New York — a demand analogous to that which caused so much anxiety in India in 1907 and 1908.[5] A second example is the increased demand for currency in 1910, which resulted largely from tariff changes favorable to the Philippines in the Payne-Aldrich tariff of 1909, and led to an increase in the Philippine circulation from P 41,500,000 June 30, 1909 to

[1] Ibid., 1912, p. 29.

[2] The Fund had assumed these proportions despite the fact that the last million dollars of the certificates of indebtedness issued to provide funds for the initial establishment of the gold standard in the Philippines (supra, p. 315) had been retired September 1, 1907 out of the profits inuring to the Fund. Sec. Ann. Rep. Chief Div. Cur., p. 3; and Ann. Rep. Treas. Phil. Islands, 1908, p. 27.

[3] The premiums realized by the Government on drafts sold against the Gold Standard Fund for the ten years 1904 to 1913 inclusive amounted to P 1,940,068. Ann. Rep. Treas. Phil. Islands, 1913, p. 25.

[4] Supra, p. 327.

[5] Supra, pp. 113–15.

P 48,700,000 June 30, 1910, an increase of over 17 per cent.[1] On the other hand, the heavy demands for transfers from the United States to the Philippines for the purpose of army and navy disbursements in the Islands, and the ease with which United States funds can be placed to the credit of the Gold Standard Fund in New York in exchange for Philippine currency credits to the army and navy in Manila, render improbable for the time being any embarrassing depletion of the Gold Standard Fund in New York. As time goes on, however, and these army and navy transfers represent a smaller and smaller proportion of the normal exchange demands of the Philippines on New York, this safety valve will be less and less effective. For the present, none the less, a 43 per cent reserve would probably be excessive. The demands for drafts on the Gold Standard Fund in New York have been large, normally running (since 1907) from ten to fourteen million dollars a year; yet it has been the very army and navy transfers, which provided the United States currency credits in New York for meeting the Philippine drafts, that created in Manila the need for the drafts themselves. They did this through continually releasing from the Gold Standard Fund and pumping into a circulation already redundant large quantities of Philippine currency for army and navy disbursements.[2]

[1] Another example is the increase in the circulation from June 30, 1906 to June 30, 1907, which was from 30,000,000 to 42,800,000. It is a question, however, whether all this represented a real increase in response to trade demands.

[2] For example, in 1912 exchange sold in Manila on the Gold Standard Fund in New York amounted to P 24,400,000, but this did not permanently deplete the Fund in New York by an equivalent amount of United States currency and result in retiring for a period the above amount of Philippine currency from circulation in the Philippines, as would have been expected under the principle of the gold-exchange standard (supra, pp. 319–22), because, although there was no commercial exchange sold in New York on the Philippine currency part of the Fund in Manila, "the Insular Treasurer furnished the Treasurer of the United States credits [out of the Gold Standard Fund] in Manila amounting to P 22,000,000, in exchange for an

The Investment of Part of the Gold Standard Fund

Under the circumstances the proper course for the Philippine Government was to determine, after careful study, how large a gold standard reserve would be needed to meet all probable demands, allowing a fair margin of safety, and then to transfer to the general fund of the treasury the excess in the Gold Standard Fund over that amount. This the Philippine Government did in Act No. 2083, passed December 8, 1911,[1] entitled "an act to fix the amount of the Gold Standard Fund and . . . authorizing the deposit of the excess of the amount so fixed to the credit of the general fund of the treasury, and authorizing the investment of a portion of the said Gold Standard Fund." The Act fixed the Fund at 35 per cent of the money in circulation and available for circulation.[2]

equivalent amount credited by the Treasurer of the United States to the Gold Standard Fund in New York." Cf. Ann. Rep. Treas. Phil. Islands, 1912, p. 29; and infra, pp. 381–82.

[1] Official Gazette, 1912, pp. 2177–78.

[2] Although the certificates of indebtedness issued to assist in inaugurating the gold standard in the Philippines had long since been paid off (supra, p. 367), and the likelihood of a further issue was very remote, the Act contained a proviso "that all proceeds of certificates of indebtedness shall remain a constituent part of the Gold Standard Fund, and be used exclusively to maintain the parity" etc. Of course the proceeds of the certificates of indebtedness were hopelessly merged with the other constituents of the Fund, and it would have been utterly impossible to distinguish them and to determine their amount. During the entire period of the withdrawal of the old local currency from circulation from 1903 to September 1, 1907, when the last million dollars of the certificates were paid off, the proceeds had been mingled with the other parts of the Gold Standard Fund. Profits had been realized on the entire Fund from 1903 to the date of this Act in the form of seigniorage, premiums on exchange, and interest on bank credits in New York. The object of this provision of the law was therefore merely to meet *pro forma* the requirement of the Philippine Coinage Act of Congress (of March 2, 1903) which declared (section 6) "that all the proceeds of said certificates [of indebtedness] shall be used exclusively for the maintenance of said parity . . . and for no other purpose" (except that a limited amount might be used as a continuing credit for the purchase of silver).

With the segregation of a fixed 35 per cent Gold Standard Fund and the transference of the balance of the Fund to the general treasury funds no fault should be found. Pursuant to this provision of the law, P 4,856,720 were transferred from the Gold Standard Fund to the general funds down to the close of the calendar year 1913.[1] Other provisions of this law, however, and of an earlier executive order to be described later,[2] are open to serious criticism, and in the judgment of the writer clash with the fundamental principles upon which the gold-exchange standard rests.

The provision of the law thus open to criticism is that contained in section 3, which authorizes the Insular Treasurer, with the approval of the Governor-General, to invest a part of the Gold Standard Fund,[3] not exceeding one half, "in loans for periods not exceeding ten years to provinces and municipalities to aid in the construction of public works, particularly those of a revenue-producing character, at three per centum interest per annum: Provided, however, that one half of such fifty per centum [of the Fund authorized to be invested] may also, with the prior approval of the Governor-General, be invested temporarily by the Insular Treasurer in loans on approved

[1] Ann. Rep. Treas. Phil. Islands, 1913, p. 22; and Rep. Auditor Phil. Islands, semifiscal year ended Dec. 31, 1913, Part I, p. 93.

[2] Infra, p. 372.

[3] An earlier step toward the investment of part of the Gold Standard Fund in relatively long-time investments was made by Act No. 2067 enacted July 24, 1911. This Act authorized the Insular Treasurer, with the approval of the Governor-General, to invest such portions of the accretions of the Gold Standard Fund arising from interest and sale of exchange as the population of the territory inhabited by Moros and other non-Christian tribes under the exclusive general legislative jurisdiction of the Commission bears to the total population of the Philippine Islands. The investments could be made in loans to be used for a number of designated purposes, including loans for periods not exceeding five years to provinces for construction of public works, loans of a type eligible for the investment of Philippine postal savings bank funds, and in the purchase of first mortgage bonds of corporations organized for the purpose of constructing and operating sugar mills. Cf. Official Gazette, IX, p. 1316.

security to the Manila Railroad Company to complete [certain] sections of railroad . . ." enumerated in the Act. The interest on these railroad loans was fixed at 5 per cent, "and the time for the total payment thereof shall not exceed six months from the date of issue of the bonds of the corresponding twenty-mile section, and in no case shall exceed thirty months from the date of the loan."

The authorization for these investments was promptly taken advantage of, and by the close of the calendar year 1913 the investments of the Gold Standard Fund amounted to P 7,646,876, of which P 3,900,000 consisted of loans to the Manila Railroad Company, and the balance (P 3,746,876) of loans to Philippine provinces and municipalities. At that time the total Fund, representing 35 per cent of the circulation, amounted to P 18,402,473,[1] so that one may say that 41 per cent was in the form of investments, 57 per cent in the form of cash in treasury vaults and deposits in banks in the Philippines and in the United States, and about 2 per cent in the form of sundry credits.[2] This means a "cash" reserve (*i.e.*, cash in vault and on deposit in bank) of about 20 per cent, a reserve which can administratively be reduced to 17½ per cent, and for the reduction of which to that point there is a strong pressure. Furthermore, the cash and deposited proportion of the Gold Standard Fund, as compared with the "invested" proportion, has steadily declined since the passage of the Act of December 8, 1911.[3]

Several years before the enactment of these two laws of 1911,[4] authorizing the tying up of portions of the Gold

[1] Ann. Rep. Auditor Phil. Islands, semifiscal year ended Dec. 31, 1913, Part I, p. 93.

[2] About P 312,000 was represented by miscellaneous items, including monies being recoined at the United States mints and accrued interest (not due). Ibid.

[3] On June 30, 1912 the cash and deposited part of the Fund represented 86 per cent of the circulation, and the invested part 12 per cent; on June 30, 1913 the corresponding percentages were 67 and 31; and on December 31, 1913 they were 57 and 41 (as given above).

[4] Acts, Nos. 2067 and 2083.

Standard Reserve fund in relatively long-time investments, the Philippine Government made an administrative departure in the same direction from the fundamental principle of the gold-exchange standard — as that standard was inaugurated and administered during the first four years of its history in the Philippines. This action is logically so closely related to the legislation of 1911 that it can best be considered in connection with that legislation. It provided for the depositing at interest in Manila banks of Philippine currency belonging to the Gold Standard Fund. The following figures gathered from the annual reports of the Treasurer of the Philippine Islands, 1908–12, will show the extent of this practice. On June 30, 1908 the Philippine currency portion of the Gold Standard Fund in Manila showed an overdraft of P 4,218,573, but the Fund had an interest-bearing deposit credit in the Manila banks of P 800,000;[1] on June 30, 1909 the Philippine currency balance of the Fund in Manila was P 824,622, of which P 800,000 was deposited at interest in Manila banks;[2] on June 30, 1910 the Philippine currency portion of the Fund in Manila was P 4,133,949, of which P 1,701,500 represented fixed interest-bearing deposits in Manila banks;[3] on June 30, 1911 the Philippine currency portion of the Fund in Manila amounted to P 2,478,912, of which P 1,096,000 represented a fixed deposit in Manila banks drawing interest at $3\frac{1}{2}$ per cent.[4] For later dates the figures of the Treasurer's reports are not in such a form as to permit the separation of these items. The 1912 Report showed that the interest on deposits from the Gold Standard Fund in Manila banks for the year amounted to P 38,360[5] (as compared with P 54,809 for the year 1911); and the 1913 Re-

[1] Ann. Rep. Treas. Phil. Islands, 1908, pp. 3 and 28. The heavy overdrafts of the Fund at this period were due to large shipments of coin to San Francisco for recoinage.

[2] Ibid., 1909, pp. 4 and 23.

[3] Ibid., 1910, pp. 5 and 25.

[4] Ibid., 1911, pp. 6 and 22.

[5] Ibid., 1912, p. 7.

port called attention to the fact that the reduction in the interest received on funds in authorized depositories was due to the fact that "a large portion of the Gold Standard [Fund] and other trust funds formerly with our depositories is now employed in loans and other more profitable forms of investment, the interest on which more than offsets the decrease herein referred to."[1] These Gold Standard Fund investments, taking the place in part of interest-bearing deposits in Manila banks, were the loans to the Manila Railroad Company and to provinces and municipalities under Authority of Act No. 2083 previously described.[2]

These investments of the Gold Standard Fund (including the interest-bearing deposits in Manila banks) are contrary to the fundamental principles upon which the gold-exchange standard rests, and, although so far apparently harmless, sooner or later they are likely to lead to unfortunate results.

If the reader will recall the principle of the gold-exchange standard previously explained,[3] he will remember that the Philippine currency part of the reserve fund was to be kept in Manila in the treasury vaults, physically withdrawn from circulation, and that the gold portion was to be kept on deposit in New York banks. When exchange in Manila should rise to the gold-export point, evidencing a relative redundancy of currency in the Philippines, the Government would sell drafts at the gold-export-point premium on the Gold Standard Fund in New York, withdrawing from circulation into the treasury vaults the Philippine currency received in payment of the drafts, and thereby relieving the relative redundancy in the circulation and tending to force the exchange rate back toward par from the gold-export-point premium. On the other hand, when exchange should fall to the gold-import point, evidencing a relative scarcity of currency in the Philippines, the depository banks of the

[1] Ibid., 1913, p. 7. [2] Supra, pp. 370–71.
[3] Supra, pp. 318–22.

Philippine Government in New York would sell drafts on the Philippine currency portion of the Gold Standard Fund in the Treasury vaults of Manila, charging the United States currency-import-point premium for the Philippines, and, on presentation of these drafts at the treasury in Manila, Philippine currency would be withdrawn from the treasury vaults and paid to the holders of the drafts, thereby increasing the Philippine circulation and relieving the relative scarcity. In short, this Gold Standard Fund was to serve both as a reserve fund and as a buffer or regulator fund. Into it redundant Philippine currency was to be drawn and out of it currency was to be paid to meet a relative scarcity. The mechanism was supposed to be as automatic as is the outward and inward flow of gold, when unrestrained, under a strict gold standard. The receipt of Philippine currency into the Gold Standard Fund in Manila was supposed to have the same effect upon the circulation as the exportation of a proportionate amount of gold withdrawn from the circulation would have in a country like the United States; and the payment of Philippine currency out of the Fund was supposed to have an effect like the importation of gold. There was practically no gold in circulation, silver pesos being unlimited legal tender, and the Gold Standard Fund thus divided between Manila and New York was to be the *ultimate reserve of the entire currency system* — a guarantee fund and a regulator fund.

The size of this Fund ought primarily to be determined by the probable variations in the currency demands of the country. If, for example, the currency needs of the Islands during the most active period of a prosperous year were estimated to be P 55,000,000, and, for a time of extreme depression, say P 45,000,000, the reserve fund would need to be such that approximately $5,000,000 could be paid out in New York in case of emergency to enable the retirement of P 10,000,000 in the Philippines; and, on the other hand, there would need to be available P 10,000,000 in the

Philippines to meet the demands for an expanding circulation at the time of most active business. Of course the Fund should be large enough to allow a generous margin of safety over and above all needs that seem reasonably probable. Contrary to popular belief, the size of the reserve fund needed in a country like the Philippines has very little to do with the difference between the bullion value and the money value of the current coins.[1] It is not a question of confidence in the money, but one of adjusting the supply of money to trade demands so as to keep the country's currency and its price level in equilibrium with those of other countries. A circulation of P 50,000,000, each peso carrying as much as 98 per cent of its money value in the value of its silver content, would require a large reserve if the country were one in which there is a wide range in the currency needs either from season to season or from prosperity to depression; while a paper currency (of which the constituent material had no value whatever) issued by a strong government like that of the Philippines could get along with a small reserve, provided the range in the currency needs were a narrow one.

Objection to Depositing Part of Fund in Local Banks

Apply these principles to the recent Philippine legislation. Of what use is P 1,000,000 of the Gold Standard Fund on deposit in Manila banks as a means of regulating the currency supply to trade demands? It is already in circulation. Surely there would be no contraction of the currency if a Manila merchant or bank should buy a draft from the

[1] An example of this misconception is found in the Report of the Treasurer of the Philippine Islands for 1913 (p. 21), where the Treasurer says, referring to the 35 per cent reserve: "In other words, for every peso in circulation or available therefor, there has been set aside the sum of $17\frac{1}{2}$ cents United States currency to make up the difference between the fluctuating intrinsic value of the Philippine silver peso and the unit of value, or gold peso, worth 50 cents United States currency."

Government on the Gold Standard Fund in New York for, say, \$50,000, and the Government should deposit the P 100,000 (plus the premium) to its credit in a Manila bank. The Government's gold fund in New York would be reduced by \$50,000, but the currency circulation of the Philippines would not be changed. There would be merely a transfer of credits on the books of the bank. If the purchase money paid to the Government for the drafts happened to be money which had been physically withdrawn from active circulation, the result would be in the direction of expansion instead of contraction, since when this money was deposited in the banks by the Government it would become bank reserve money and as such the basis of loan and deposit expansion. On the other hand, if Manila exchange should be at the currency-import point and a merchant in New York should buy through the Philippine Government's depository bank in New York a draft on the Gold Standard Fund in Manila for P 100,000, and if the draft on its arrival in Manila should be paid by a check for P 100,000 on the Gold Standard Fund in a Manila bank, this would not act like an importation of P 100,000, which would increase the circulation by that amount and thereby relieve the scarcity. More likely it would result in a transfer of a P 100,000 bank deposit credit from the Government's account to that of the merchant. If, as is likely, the merchant's account were the more active (*i.e.*, had a higher rate of deposit turnover than the Government's), the bank would be required to strengthen its reserve and the net result would be the contraction of the currency in active circulation (outside of bank reserves) rather than the needed expansion.[1] Obviously, therefore, that part of the Gold Standard Fund kept on deposit in banks in the Philippines is prevented from performing the chief function of the Philippine branch of the Gold Standard Fund, *i.e.*, the function of auto-

[1] There would be an increase, however, in the average rate of deposit turnover.

matically regulating the currency supply to the demands of trade.

If it be replied that the sum kept on deposit is comparatively fixed, and that the part kept in the treasury vaults is adequate to perform the function of the regulator fund, the obvious rejoinder is that it is only the latter part that performs that function, and that if the former is not needed for Gold Standard Fund purposes, it should be transferred to other funds where it is needed. There is no need of "a secondary Philippine currency reserve," and if there were, such deposits would not constitute a good one; for in times of monetary stringency the withdrawal by the Government of large fixed deposits from the banks would be a sad expedient for relieving the stringency.

Objections to Loaning Part of Fund

That part of the Gold Standard Fund — legally not to exceed 50 per cent of the Fund and at present exceeding 40 per cent — which is invested in public or private loans, according to the provisions of Act No. 2083, is of even less service to the Philippine currency system, peso for peso, than is the part on fixed deposit in Manila banks; for three of the four depository banks in the Philippines are branches of foreign banks (two being English and one American) possessing large capitals and doing an extensive business in different parts of the Orient. From a fiscal [1] point of view, it is difficult to imagine an emergency in which they could not by great effort meet their deposit obligations to the Philippine Government in a reasonable period of time.

[1] The word fiscal is used, since it would not be a financial failure on the part of the banks, but a monetary failure on the part of the Philippine Government, if there were not a sufficient supply of Philippine currency in the Gold Standard Fund in Manila with which to honor drafts on that Fund, the purchase of which at legal rates was sought by the New York offices of these banks from the New York depositories of the Philippine Gold Standard Fund.

But even this cannot be said of the "invested" portions of the Fund. Clearly this invested part is absolutely functionless as a regulator fund. Of what use, moreover, as a reserve fund in a country like the Philippines is a fund invested in ten-year loans to provinces and municipalities for capital investments in public works, or in loans for extensions of a Philippine railway system, or for the building of sugar mills in a southern province? To all intents and purposes, theoretical as well as practical, this invested portion of the Gold Standard Fund is functionless as a monetary reserve, and it is a misnomer to call it part of the Gold Standard Fund.

If in reply to this criticism it be said that the profits on this invested portion of the Fund accrue to the Fund and help to maintain it, the reply is that these profits are not needed to maintain the Fund, inasmuch as not only these profits but a large part of the profits on the uninvested portion of the Fund are being turned over annually to the general fund of the treasury.[1] Furthermore, the interest rate realized on moneys of the Gold Standard Fund kept on deposit in depository banks in New York averages nearly as large as that realized on these Philippine investments. It may be a worthy object "to keep the money at home," and encourage the development of useful public works in the provinces and municipalities as well as the building of sugar mills by private enterprise; *but that is no function for the country's ultimate currency reserve.*

Even if it be admitted that these investments might serve as a sort of remote secondary reserve for the coun-

[1] For the fiscal year 1913 accumulated profits (representing a surplus over the 35 per cent reserve fixed by law) of the Gold Standard Fund amounting to P 889,538 were transferred to the general fund. The interest on loans to provinces, municipalities, and the Manila Railroad Company amounted to only P 134,850. For the six months ending Dec. 31, 1913 further profits of P 570,154 were transferred to the general fund. Ann. Rep. Treas. Phil. Islands, 1913, pp. 22–23; and Rep. Sec. Fin. Justice, 1914, p. 222.

try's currency, that fact would not justify their existence. No remote secondary reserve that cannot be used as a regulator fund is needed. The Philippines under the gold-exchange standard need a reserve almost exclusively as a regulator fund, and an amount that will be sufficient for that function will incidentally be adequate as a guaranty of the currency's gold parity. The credit of the Philippine Government is excellent, and there is no lack of confidence in its currency. Furthermore, in case of emergency, the Philippine Government is authorized, for the maintenance of the parity, to sell gold certificates of indebtedness to any amount not exceeding $10,000,000.[1] Certainly this power is a sufficient guaranty for the meeting of remote contingencies in the case of a currency whose total circulation is equal only to approximately $25,000,000.

Suggested Changes in Gold Standard Fund

The writer believes that the permanent success of the gold-exchange standard in the Philippines requires that the Gold Standard Fund should be maintained at 25 per cent at least of the country's entire circulation, and preferably 30 per cent, considering the experience of the country in 1903 and 1910[2] and that of India in 1907 and 1908.[3] The reserve should be divided into two parts, one kept chiefly in the form of Philippine currency, exclusively in the Government's vaults in the Philippines; and the other, in the form of interest-bearing deposits, properly distributed among a few very strong banks in the United States — banks belonging to the Federal Reserve System. It would be well for the Philippine Government promptly to raise its cash reserve in Manila and its deposited reserve in New York in the aggregate to 25 per cent, transfer the invested part of the Gold Standard Fund in name, as it is now transferred in fact, to the general fund, and then

[1] Supra, p. 315. [2] Supra, pp. 367–68. [3] Supra, pp. 113–23.

gradually to raise the reserve through accretions of annual profits to a 30 per cent basis.

In making the above criticisms it is not intended to give the impression that the Philippine currency system is *at present* in any real danger. Under the existing conditions of heavy army and navy payments by the United States in the Philippines, with the large transfers of credits [1] between the United States and Manila to which they give rise every year, an effective exploitation of these transfers, without too much regard for fiscal needs, would enable the Philippine Government to get along with a very small reserve fund indeed. In fact, during the years 1904 and 1905, and 1907 to 1909, when a large part of the Gold Standard Fund was continually tied up in recoinage operations, the Government maintained the parity with a very small working balance in the fund — often in fact working upon a substantial overdraft.[2] Two other facts may assist the Philippines in meeting demands upon the Gold Standard Fund: (1) One is the authority granted by the Act of Congress of June 23, 1906 [3] to the Philippine Government

[1] Supra, pp. 368–69.

[2] At the end of the fiscal year 1905 the effective balance of the Fund in New York and Manila combined was but P 7,368,704, and the circulation at that time was approximately P 28,000,000; at the end of the fiscal year 1906 the effective balance was P5,669,375 and the circulation was approximately P 30,000,000. In 1906 the Government sold drafts on the Fund in New York to the equivalent of P 14,909,722. At the end of the calendar year 1907 the effective Fund (*i.e.*, the part not tied up in recoinage operations) was represented by an overdraft of P 4,891,505, but in the very month (December 1907) in which this overdraft existed the Government sold to banks and commercial firms in the Philippines drafts on the Gold Standard Fund in New York to the equivalent of P 4,050,000. The average working balance of the Fund for the twelve months of the fiscal year 1908 (balances being taken for the last day of each month) was an overdraft of P 2,343,390, while the drafts on the Fund in New York sold by the Government to banks and commercial firms in Manila for the fiscal year 1908 amounted to the equivalent of P 26,044,658, and in 1908 there were no drafts sold in New York on the Fund in Manila to private concerns. Cf. Ann. Rep. Treas. Phil. Islands, 1908, p. 29; and ibid., 1913, p. 25.

[3] Supra, pp. 356–58.

to substitute for silver pesos in the silver certificate reserve gold coin of the United States to an amount not exceeding 60 per cent of the reserve. At the close of the fiscal year 1913 this certificate reserve amounted to P31,568,431. Sudden heavy demands for increased amounts of Philippine currency in the Islands could therefore be met in a short time by releasing pesos from the silver certificate reserve against a deposit of an equivalent amount of United States gold coin brought from the United States. (2) The other fact is that United States paper currency readily circulates in the Philippines and emergencies could be met to a considerable extent by the importation and exportation of this money.[1]

None of these expedients, however, nor all of them together, will provide a permanent and satisfactory substitute for an adequate and effective reserve fund. Army and navy transfers should be dictated by the fiscal necessities of the United States Government, and not by the monetary needs of the Philippines. As time goes on the amounts of these army and navy transfers are likely to decline absolutely, and, as the trade of the Islands grows, are almost certain to decline relatively to the commercial demands for gold standard exchange. Furthermore, most of the army and navy normally stationed in the Philippines may at any time be called away by military exigencies, and these very exigencies which would remove from the Philippine Government the privilege of receiving gold credits in New York in exchange for Philippine currency (and United States currency) credits in the Philippines might at the same time so disturb and depress Philippine business and confidence as to result in very heavy demands upon the New York branch of the Gold Standard Fund. Moreover, if the United States is ever to withdraw permanently from the Philippines, *it should leave the Islands a fully developed and automatically working currency system, and not one whose*

[1] For an illustration of this see supra, p. 356.

props will be knocked from under it by the very act of withdrawing from the Islands. The substitution of gold coin for silver pesos in the silver certificate reserve would be an expensive procedure, involve sudden demands upon our gold supplies at home, and would at best be regarded as a temporary and emergency expedient. To increase the amount of United States currency circulating in the Philippines would be bad policy. It would result in the inconveniences incident to a dual currency and would interfere in normal times with the smooth and automatic working of the gold-exchange standard. The quicker the Philippine currency is reëstablished on the basis of an automatically working, pure gold-exchange standard, with an adequate reserve, every peso and dollar of which is functioning as reserve, the better for the Islands.

APPENDIX A

Unwillingness of the Manila Banks to Receive United States Currency Deposits from the Public

During the entire period of the Military Government the Manila banks refused to accept deposits of United States currency from individuals. As a result, an army officer or soldier receiving his pay in United States currency and wishing to keep his funds on deposit in a bank was compelled to sell his United States currency to the bank for local currency at the current rate and deposit the local currency. In case he wished to get United States currency from the bank he was compelled to sell his local currency credit at the current rate for United States currency. There was always a substantial difference between the banks' buying rate for United States currency and their selling rate, and the claim was repeatedly made that the banks had an understanding between each other for the maintenance of highly profitable and practically non-competitive rates. An example of these complaints is the following from a letter dated May 9, 1899 written by the Chief Paymaster of the army in the Philippines:

"The two English banks of Manila seem to be in collusion, and charge exorbitantly for all business transacted over their counters. When an officer or enlisted man goes to deposit his gold with them it is credited to his account in silver, at the current rate — for this is a silver country — and if he wants gold for any purpose they charge him never less than 5 per cent for it. I have noticed that when pay day approaches the banks put down the rate for gold, so they can make a greater profit from the soldiers." [1]

[1] Edwards, p. 8.

The banks, on the other hand, maintained that the fluctuations in exchange were matters of the world markets and entirely beyond their control, that the prices they charged were entirely reasonable, and that the demand for United States currency from them on the part of individuals was so small that it was not worth their while to establish separate accounts and books for United States currency deposits.[1]

The materials are not available for a safe judgment on the merits of this controversy. Such evidence as we have, however, seems to justify the following conclusion. Very early the banks provided facilities for gold deposits on the part of officers charged with the handling of public funds,[2] and the needs of individuals for the making of United States currency deposits were not great. Army officers and soldiers desiring to transfer funds home could purchase of the army paymaster drafts at par on the United States subtreasuries, and the pay departments offered to soldiers facilities for interest-bearing savings accounts in United States currency. For retail expenditures in the Philippines local currency was the money in almost univeral use. Furthermore, many of the criticisms urged against the banks showed a profound ignorance with regard to currency and exchange conditions in the Orient.[3]

[1] Cf. letter defending Manila banks written to the Secretary of War by the New York Agency of the Canadian Bank of Commerce. The letter was written at the request of the Chartered Bank of India, Australia, and China. Edwards, pp. 48 and 49.

[2] General Otis in a letter of August 31, 1899 wrote: "For a long time . . . [the banks] allowed [Pfs.] 2 silver for $1 in gold, but recently have arranged for receiving gold deposits from disbursing officers on account and to make payments thereon in gold." Ibid., p. 36.

[3] For example, criteria frequently cited as to what constituted a fair basis for computing rates were: sterling exchange rates in Hongkong, the Secretary of the Treasury's quarterly rate for the bullion value of the Mexican dollar, and the bullion value of the Mexican dollar at the current London price of silver. As a matter of fact Hongkong exchange was quoted in terms of the sterling value of the "Hongkong dollar," and "clean Mexican dollars" (*i.e.*, unchopped dollars) of the type circulating in the Philippines

On the other hand it must be said that the action of the banks was shortsighted and selfish. They were foreign banks, the Government was a military government for most of the period of the controversy, the time was one of war or near-war, and the people chiefly concerned were soldiers. Under such circumstances it would be difficult to imagine a surer way to arouse antagonism than to discriminate against the ruling country's currency. Since the banks handled United States currency deposits for disbursing officers, it would have involved little additional trouble and expense to accept the few United States currency deposits offered by individuals. The chief reason for their unwillingness to do so, the writer is convinced, was not the additional expense of handling such accounts, but the loss of profits on exchange.

On November 28, 1900 the Philippine Commission passed a law[1] "to prevent discrimination against money of the United States by banking institutions." The first section of the law required that: "Every bank of deposit in the Philippine Islands shall accept deposits both in the money of the United States and in Mexican or other local money, and shall honor checks on or repay such deposits in the kind of money in which they are made." The only noteworthy feature of this measure is that it was not adopted two years before by a general order of the Military Government.

were generally at a substantial premium in Hongkong. The Secretary of the Treasury's rate represented an average rate for a three months' period in the past, and was obviously not a fair basis for current values in the Philippines. There were substantial charges incident to the coinage of Mexican dollars and their exportation from Mexico, and since the distance of Manila from London or Mexico was great, there was a very tardy response of the monetary supply in the Philippines to the ups and downs of the bullion value of the Mexican dollar in those countries. The gold value of the Mexican dollar in the Orient as measured by the gold exchanges frequently varied as much as 3 or 4 per cent on either side of "bullion par."

[1] Report of Taft Philippine Commission, 1900, p. 322.

APPENDIX B

Bibliography on Philippine Currency Reform

Aguilar y Biosca, D. F., Recopilador. Legislacion sobre Moneda Filipina. Intendencia de Hacienda. Manila, 1893.

Banco Español Filipino. Estatutos. Real Decreto de 1896. Manuscript in Bureau of Archives, Manila.

Blair, E. H., and Robertson, J. A. The Philippine Islands, 1492–1898. 55 volumes. Cleveland, Ohio: Arthur H. Clark Company.

Bureau of Insular Affairs, War Department. Annual Reports, 1902–14. Washington: Superintendent of Documents.

——. Quarterly Summary of Commerce of the Philippine Islands. *Passim.* Washington: Superintendent of Documents.

Bureau of Statistics, Department of Commerce and Labor. The Commercial Philippines in 1906, Showing the Trade of the Islands, the Chief Countries Participating therein, the Principal Articles Imported and Exported, and Details of Trade of the United States with the Islands, during a Term of Years. Washington: Superintendent of Documents, January 1907.

Chalmers, Robert. A History of Currency in the British Colonies. London: Eyre & Spottiswoode, 1893.

Commission on International Exchange. Gold Standard in International Trade. Report on the Introduction of the Gold-Exchange Standard into China, the Philippine Islands, and Other Silver Using Countries, and on the Stability of Exchange. Washington: Superintendent of Documents, 1904.

——. Stability of International Exchange. Report on the Introduction of the Gold-Exchange Standard into China and Other Silver Using Countries. House Document, No. 144, 58th Congress, 2d Session, 1903.

Conant, Charles A. A Special Report on Coinage and Banking in the Philippine Islands Made to the Secretary of War, November 25, 1901. Washington: Superintendent of Documents, 1901.

——. The Currency of the Philippine Islands. Annals of the American Academy of Political and Social Science, 1902.

EDWARDS, CLARENCE R., Compiler. Currency and Exchange in the Philippines. House Miscellaneous Documents, LXXIV, Nos. 151–228. 56th Congress, 2d Session, 1900–01.

El Comercio. Daily Newspaper. Manila, 1903–06.

GARCIA-PATÓN, FEDERICO. La Fabricacion de las Monedas. Madrid: Tipografia de J. Benito Cerezo, 1903.

HARDEN, EDWARD W. Report to the Secretary of the Treasury on the Financial and Industrial Conditions of the Philippine Islands. Washington: Superintendent of Documents, 1898.

HENNICKE, ALFRED. Die Entwicklung der Spanische Währung von 1868–1906. Stuttgart & Berlin: J. G. Cotta'sche Buchhandlung Nachf., 1907.

JENKS, JEREMIAH W. Currency Problems in the Orient. Papers and Proceedings of the Fifteenth Annual Meeting of the American Economic Association. December 1902.

——. Report on Certain Economic Questions in the English and Dutch Colonies in the Orient. Washington: Superintendent of Documents, 1902.

KEMMERER, E. W. First Annual Report of the Chief of the Division of the Currency of the Philippine Islands. Manila: Bureau of Public Printing, 1904.

——. Second Annual Report of the Chief of the Division of the Currency of the Philippine Islands. Manila: Bureau of Public Printing, 1905.

——. The Establishment of the Gold-Exchange Standard in the Philippines. Quarterly Journal of Economics, XIX, 1905.

——. The Recent Currency Reform in the Philippines. A Paper Read at the First Pan-American Scientific Congress in Rio, Brazil, 1907. Printed by the Congress.

——. The Recent Rise in the Price of Silver and Some of its Monetary Consequences. Quarterly Journal of Economics, XXVI, 1912.

——. Money and Credit Instruments in their Relation to General Prices. Second Edition. New York: Henry Holt & Co., 1909. Especially Book I, Chapter 5.

LEROY, JAMES A. Philippine Life in Town and Country. New York: G. P. Putnam's Sons, 1906.

——. The Americans in the Philippines. Two volumes. New York: Houghton Mifflin Company, 1914.

Manila American. Daily Newspaper. Manila, 1903–05.

Manila Cablenews. Daily Newspaper. Manila, 1903–06.

Manila Times. Daily Newspaper. Manila, 1901–06.

OTIS, E. S. Annual Report of the Major-General Commanding the Department of the Pacific and the Eighth Army Corp, and Mili-

tary Governor of the Philippine Islands. August 31, 1899. House Document, V, 56th Congress, 1st Session.
Philippine Government. Annual Reports of the United States Philippine Commission from the Report of the Schurman Commission in 1900 to Report of 1914.
——. Annual Reports of the Auditor of the Philippine Islands. 1901–14. Manila: Bureau of Public Printing.
——. Annual Reports of the Chief of the Division of the Currency of the Philippine Islands. 1904 and 1905. Manila: Bureau of Public Printing.
——. Annual Reports of the Secretary of Finance and Justice. 1901–14. Manila: Bureau of Public Printing.
——. Annual Reports of the Treasurer of the Philippine Islands. 1906–14. Manila: Bureau of Public Printing.
——. Executive Orders and Proclamations. Annual. Manila: Bureau of Public Printing.
——. Official Gazette of the Philippine Islands. Weekly. 1902–14. Manila: Bureau of Public Printing.
Philippine Islands. Census, 1903. Four volumes, especially volume IV. Washington: Bureau of the Census, 1905.
PIXLEY and ABELL, Compilers. A Table Showing the Monthly Fluctuations in London in the Price of Bar Silver per Ounce Standard from January 1833 to the Present Time. Annual. London: Pixley and Abell, Bullion Brokers
ROOT, L. CARROLL. The Currency Question in the Philippines. Sound Currency, March 1901.
ROSCHER, W. Kolonien, Kolonialpolitik und Auswanderung. Third Edition. Leipzig: 1885. See also English Translation by E. G. Bourne under title of The Spanish Colonial System. New York: 1904.
Secretary of War. Annual Reports. 1898–1914. Washington: Superintendent of Documents.
United States Military Governor of the Philippine Islands. Special Orders, General Orders and Circulars, 1900. Washington: Superintendent of Documents.

See also bibliography on Indian Currency Reform, supra, pp. 149–52.

PART IV

THE STRAITS SETTLEMENTS CURRENCY REFORM[1]

[1] This paper is based upon three previously published articles by the author relating to this subject. They are: A Gold Standard for the Straits Settlements, I and II, in Political Science Quarterly, XIX, 1904, pp. 639–649; and XXI, 1906, pp. 663–698; and The Recent Rise in the Price of Silver and Some of Its Monetary Consequences, in Quarterly Journal of Economics, XXVI, 1912, pp. 254–261. These articles have been revised and supplemented. The author is under obligation to the publishers for permission to use the material in this volume.

CHAPTER I

The Straits Settlements Currency prior to the Reform of 1903

Among the oriental countries recently to undertake the adoption of a gold standard currency is the Straits Settlements. This British colony, composed of Singapore, Penang, Malacca, and their dependencies, is one of the great entrepôts of the shipping trade of the Orient. Like most eastern countries it has had a varied monetary experience.[1] The tin "pice," the various kinds of silver rupees, the Dutch rix dollar, the Japanese copang, the Carolus dollar of Spain, the Mexican and British dollars and their kindred South American coins, as well as sterling coins and money coined by the Straits Settlements themselves, have all had, at one time or another, a wide circulation in the Malay Peninsula. From early in the sixteenth century until the present time, however, in spite of several attempts to displace it, the principal medium of exchange and the real money of account of the Straits Settlements has been the old Spanish dollar or some of its illustrious descendants like the Mexican and British dollars.

In 1867, the year of the transfer of the Straits Settlements from the control of the Indian Government to that of the Secretary of State for the Colonies, an ordinance was passed repealing all laws making Indian coins legal tender and declaring that, after April 1 of that year, "the dollar

[1] A brief treatment of the earlier history of the Straits Settlements currency is given in Chalmers, chap. 38.

issued from her Majesty's mint at Hongkong, the silver dollar of Spain, Mexico, Peru, and Bolivia, and any other silver dollar to be specified from time to time by the Governor in Council, shall be the only legal tender," with the exception of certain subsidiary coins.[1] Since 1871 subsidiary coins for the Straits Settlements have been struck by the royal mints. An order in council dated October 21, 1890 repealed all previous laws with reference to legal tender in the Colony and declared the Mexican dollar the standard of value, at the same time giving unlimited legal tender to the Japanese yen, the Hongkong dollar and half-dollar, and the American trade dollar. Prior to the passage of the currency law of 1903 two subsequent orders in council of importance relative to the currency were issued under dates of February 2, 1895 and October 20, 1898. These orders taken together removed the legal tender quality from the American trade dollar and the Japanese yen, reaffirmed the law making the Mexican dollar the standard coin, and declared that the Hongkong dollar and the recently coined British dollar should be legal tender and be treated as equal to the standard dollar. The Straits currency thus established was, with a slight modification, adopted by the Federated Malay States.

At the beginning of the calendar year 1903 the actual currency of the Straits Settlements, the Federated Malay States, and Johore was roughly estimated as follows:[2]

(1) About thirty million British and Mexican dollars, of which by far the larger part was British dollars, and of which nearly a third represented coin held in reserve against the Government's note issue.

(2) About six million seven hundred thousand dollars of Straits Settlements subsidiary coins.

(3) An unknown amount of copper coins, the remainder of a total coinage since 1871 officially stated at 1,887,500

[1] Straits Settlements Currency Committee, Report of 1903, pp. 4 and 5.
[2] Ibid., pp. 5 and 6.

dollars (nominal), of which large quantities had been shipped out of the country.

(4) About thirteen million dollars of government notes.

Dissatisfaction with Silver Standard

The effect of the fall in the gold price of silver from 1873 to 1893 was similar in the Straits Settlements to what it was in India,[1] Mexico,[2] and the other silver standard countries of the world which had extensive trade relations with gold standard countries. The evils resulting to local business from the rapidly falling and fluctuating exchange with gold standard countries finally became so serious in 1893, after the closing of the Indian mints and the calling of the extra session of the Congress of the United States to consider the repeal of the Sherman Silver Purchase Act, that the British Colonial Secretary telegraphed to the Governor of the Straits Settlements for a report as to possible remedial measures in the direction of securing for the Colony greater stability of exchange. In response to this telegram a special committee was appointed by the Governor to investigate local monetary conditions and to suggest remedial measures. The committee examined a considerable number of witnesses, whom they considered "fair representatives of the thinking men of the Colony of all classes," and found that, with the exception of the majority of the Chinese traders, the witnesses examined were "mostly in accord in declaring that the fall in exchange has been disadvantageous to these Settlements." In spite of this fact, however, the committee was unable to agree upon any proposition favoring the introduction of the gold standard, and their report was divided. Half of the twelve members of the committee favored a gold standard, five of them advocating the introduction of the rupee upon the plan which had at that

[1] Supra, pp. 14–32. [2] Infra, p. 472.

time but recently been adopted by India, provided, however, that that plan should prove a success in India. The other half of the committee, including all the native members, favored a continuation of the silver standard.[1]

Currency Reform Plan of Singapore Chamber of Commerce

From 1893 to 1897 there was considerable agitation and newspaper discussion in the Straits Settlements concerning the advisability of adopting a gold standard, but nothing came of it until 1897, when on August 25 a committee of the Singapore Chamber of Commerce, by a unanimous vote, adopted a resolution favoring the establishment of a fixed par of exchange with gold countries, and appointed a sub-committee "to enquire into the local currency with the view of calling attention of Government to the question of converting the Straits currency to a gold standard."

The essence of the recommendations of this sub-committee may be summed up as follows: [2]

(*a*) The Government was to adopt the English sovereign as the basis of the new currency "with a Straits dollar — fixed at the value of 2*s.* — subsidiary to it," and the existing subsidiary silver coinage was to be continued unchanged except for being placed upon a gold basis.

(*b*) The Government was

"not to let its intention be known, and, when a decision . . . [was reached, was] to pass a law at one sitting of the legislative council, and immediately thereafter issue a notification to the effect that during a term sufficiently brief to prevent importation, all dollar coins then legally current in the colony would be received at certain specified places and government currency notes given in exchange; and that,

[1] A copy of the report of this committee is given in Appendix xvi of the Minutes of Evidence and Appendices of the Straits Settlements Currency Committee's Report.

[2] Ibid., App. xvii.

after the expiry of such term, the British, Mexican, and other dollars in circulation would be demonetized."

The Federated Malay States were to promulgate the same law simultaneously.

(*c*) From the stock of silver obtained by the Government from its exchange of notes for British and Mexican dollars a limited supply of the new two-shilling dollars was to be coined, these dollars to contain an amount of silver of from sixty to seventy per cent of that contained in the British and Mexican dollars, the seigniorage to accrue to the gold reserve.

Nothing of any consequence in the way of monetary reform developed from the above plan. It was severely criticized by the Governor, by the President-General of the Federated Malay States, and by many others in high position.[1] This criticism was based on the following grounds:

(1) The expense involved in maintaining such a fiduciary coin at a two-shilling value and in exchanging the new dollar for the old one.

(2) The danger of counterfeiting, which in the Orient was believed to be great in the case of coins like the ones proposed, whose nominal value was so far above their bullion value.[2]

(3) The difficulty of the Government's keeping its intentions secret until the final passage of the law; and, on the other hand, if the public were notified in advance, the danger of an inundation of British and Mexican dollars, to take advantage, either legally or illegally, of the two-shilling dollar exchange offered.

(4) The difficulty of inducing the natives, who were accustomed to judge the value of a coin by its weight, to

[1] Ibid., App. xxviii, No. 12. See also Appendix No. 54 of the Index and Appendices to the Evidence Taken before the Committee Appointed to Enquire into the Indian Currency, 1899, *i.e.*, "The Fowler Committee."

[2] Cf. supra, p. 305.

take, at a higher value, a coin of a little more than half the weight of the one to which they were accustomed.

(5) The difficulty of inducing the native holders of the old dollars, especially those of the Federated Malay States, to exchange them for a paper currency with which they were not familiar.

As a result of these and other similar objections nothing came of the proposed plan.

The Straits Settlements Currency Committee

Its rejection gave a quietus to the subject of a gold standard for the Straits Settlements, as far as any official action was concerned, until the middle of 1902. On June 9, 1902 the Singapore Chamber of Commerce again addressed a letter to the Colonial Government asking whether

"in view of the recent serious decline in the value of the dollar current here, the violent fluctuations in the price of silver and the extreme uncertainty as to the future of this metal, all of which are not only causing great inconvenience to the trade of the Colony but constitute grave obstacles to the development of its natural resources by stopping the flow of capital from other parts of the world,"

[the Government were prepared to investigate into] "the feasibility and expediency of securing fixity of exchange." [1] This letter, together with certain subsequent communications upon the subject, was forwarded to the colonial secretary in July.

The result of these communications was that a committee composed of Sir David Barbour, Mr. W. Adamson, Mr. G. W. Johnson, and Mr. W. Blaine was appointed by the Secretary of State for the Colonies to consider:

(1) "The expediency . . . of introducing a gold standard of currency in the Straits Settlements and the neighboring Malay States; [and] (2) the practicability of making

[1] S. S. Cur. Com. Rep., p. 7.

the change and the steps which in the opinion of the Committee should be taken to effect this object if the change should be decided upon."[1]

The Committee began its hearings in London, November 13, 1902, and continued taking testimony until about February 1, 1903. During that time a mass of testimony both verbal and written was taken. The Committee's sittings having been in London, it was necessary that the greater part of the testimony should be that of English merchants having trade experience with the Straits Settlements or with the East generally — the class of persons who, it will be noted, naturally would have been most favorable to the establishment of a gold standard. The masses of the population, represented by the natives, and by the Chinese, who do a large part of the business of the Straits Settlements and of the Federated Malay States, could not be heard directly; while through petitions and resolutions they took comparatively little part in the controversy — in fact they were for the most part ignorant of the entire matter. On the whole the evidence is that the weight of opinion among the more intelligent of these classes was on the side of maintaining the *status quo*. The European community, with the exception of most of the bankers and of a considerable number of exporters, were almost a unit in favor of a gold standard.

A detailed discussion of the evidence brought forth in this testimony and published in the minutes of the Committee's report is not necessary. The report of the local committee appointed in 1893 to consider the subject of the Straits currency declared that "all the effects remarked on in paragraphs 21–28 of the report of Lord Herschell's Committee are in operation in the Straits." This statement was nearly as true in 1903 as in 1893. A few salient features of the conditions leading to the legislation of 1903 may, however, briefly be mentioned.

[1] Ibid., p. 3.

Instability of Exchange

The annual fluctuations in the gold value of the local money during the period 1891 to 1901 are shown in the following table.[1]

RATES FOR BANK BILLS ON LONDON

(Four Months Sight)

YEAR	HIGHEST	LOWEST	AVERAGE	RANGE
	s. d.	*s. d.*	*s. d.*	*Per Cent*
1891	3 $6\frac{1}{4}$	3 $1\frac{3}{8}$	3 3	$11\frac{1}{2}$
1892	3 $1\frac{3}{8}$	2 $9\frac{1}{8}$	2 $10\frac{5}{8}$	$11\frac{3}{8}$
1893	2 $9\frac{5}{8}$	2 $4\frac{1}{2}$	2 $7\frac{3}{8}$	$15\frac{1}{4}$
1894	2 $3\frac{7}{8}$	2 $0\frac{1}{8}$	2 $1\frac{3}{4}$	$13\frac{7}{16}$
1895	2 $3\frac{1}{16}$	1 $11\frac{1}{2}$	2 $1\frac{1}{2}$	$7\frac{3}{8}$
1896	2 3	2 1	2 $2\frac{1}{8}$	$16\frac{1}{2}$
1897	2 $1\frac{13}{16}$	1 $9\frac{9}{16}$	1 $11\frac{15}{16}$	$7\frac{1}{2}$
1898	2 0	1 $10\frac{3}{16}$	1 $11\frac{5}{16}$	$2\frac{3}{4}$
1899	2 $0\frac{5}{16}$	1 $11\frac{3}{8}$	1 $11\frac{15}{16}$	$3\frac{15}{16}$
1900	2 $2\frac{3}{16}$	1 $11\frac{3}{4}$	2 $0\frac{1}{2}$	$9\frac{5}{16}$
1901	2 $1\frac{5}{8}$	1 $9\frac{7}{8}$	1 $11\frac{11}{16}$	$14\frac{5}{8}$
1891–1901	3 $6\frac{1}{4}$	1 $9\frac{7}{8}$	2 $3\frac{3}{8}$	$39\frac{5}{8}$

These figures show a great instability of exchange, except for a few years (notably 1898 and 1899).

Sterling Obligations

The Straits Settlements were not, like India, practically forced to the establishment of a fixed par of exchange by the existence of a large public debt payable in gold.[2] The Straits Government itself had no public debt, while the small debt of the Federated Malay States was a local interstate debt, payable in the local silver currency. Both governments, however, regularly had large sterling obligations to meet in the purchase of supplies, while the

[1] Cf. Min. Evid. App., S. S. Cur. Com. Rep., p. 143.

[2] Cf. supra, pp. 14–17.

salaries of all the higher officials of the Straits Government were on a sterling basis.[1] Inasmuch as these charges remained relatively fixed regardless of the fluctuations in the gold value of the local dollar, while the gold value of the revenue received tended to fall rapidly with the fall of exchange, the Government found itself handicapped in meeting its obligations.

Foreign Trade

The relative importance of the Straits Settlements trade with gold and silver standard countries, respectively, during the period from 1891 to 1901, may be seen from the following figures representing imports and exports of merchandise inclusive of intersettlement trade and exclusive of treasure.[2]

TRADE WITH SILVER STANDARD COUNTRIES

(British dollars, thousands)

YEAR	EXPORTS	IMPORTS	TOTAL EXPORTS AND IMPORTS
1891	45,579	83,937	129,516
1892	48,140	93,946	142,086
1893	44,992	83,891	128,883
1894	53,771	94,068	147,839
1895	55,434	96,877	152,311
1896	57,079	96,260	153,339
1897	57,299	98,769	156,068
1898	64,747	98,615	163,362
1899	68,710	121,945	190,655
1900	76,294	135,402	211 696
1901	79,965	142,033	221,998

[1] See Colonial Office List, 1903, pp. 309–11; and Huttenbach, The Silver Standard and the Straits Currency Question, pp. 9 and 10.

[2] Min. Evid. App., S. S. Com. Rep., pp. 130 and 131.

TRADE WITH GOLD STANDARD COUNTRIES

(British dollars, thousands)

YEAR	EXPORTS	IMPORTS	TOTAL EXPORTS AND IMPORTS
1891	68,910	44,895	113,805
1892	74,693	43,436	118,129
1893	89,538	68,547	157,085
1894	104,971	88,613	193,862
1895	105,394	88,468	193,862
1896	104,698	89,936	203,634
1897	114,878	99,591	214,469
1898	129,394	124,387	253,781
1899	157,145	133,346	290,491
1900	174,621	154,994	329,615
1901	176,808	150,776	327,584

While the figures show a healthy growth of trade in general, it is noteworthy that the greater proportion of the foreign trade at the close of the period was with gold standard countries, that the trade with those countries was a rapidly growing one, that its growth was more than commensurate with that with the silver standard countries, and that despite the severe handicap given to the import trade with gold standard countries by a falling exchange, the reported imports from those countries had been for some time larger than those from silver standard countries, while the growth of the former had been much the more rapid. As would have been expected, the exports to silver standard countries lagged far behind those to gold standard countries.

While it is doubtless true that most of the trade with gold standard countries, appeared in the colony's trade statistics, and that a considerable part of what Mr. August Huttenbach called the "Hinterland trade" with silver countries did not appear, and while Mr. Huttenbach may have been correct in maintaining that dollar for dollar the trade with the silver standard countries was somewhat more impor-

tant to the colony than that with the gold standard countries, it was none the less true that the Straits' foreign trade both actually and prospectively should logically have placed it among the gold standard countries long before 1903.

Other Disadvantages of Silver Standard

Another serious disadvantage of the existing silver standard, the Committee believed, was the discouragement to the investment of foreign capital in the Colony, due to the apparent, and in many cases real, decline in the sterling value of capital invested in the Colony. These facts, together with the element of uncertainty and speculation which was brought into business by a fluctuating exchange, the feeling that exchange had fallen to the point beyond which a further fall would cease to be profitable to the export trade, and the movement on the part of neighboring countries toward the gold basis, forced the Committee to the conclusion that the time was ripe for placing the Straits Settlements, the Federated Malay States, and Johore upon a gold standard.

Various Plans for Introducing the Gold Standard

Three principal methods of making the change to the gold standard were considered. The plan suggested by the Singapore Chamber of Commerce in 1897 was believed to be impracticable for the reasons already stated.[1] The introduction of the Indian currency system, which was recommended by five members of the local currency committee in 1893, involving as it did a change in the unit of value from the dollar to the rupee, the adoption of a currency which would be controlled largely by another country, and whose bullion value was far below its face value, found comparatively few supporters in 1903, whatever may have been the merits of the plan ten years before.

[1] Supra, pp. 395–96.

CHAPTER II

A Currency Reform Plan Adopted

The plan finally recommended by a unanimous vote of the Straits Settlements Currency Committee may best be described in the Committee's own words:

"A special Straits dollar of the same weight and fineness as the British dollar at present current in the East [gradually to be substituted] for the Mexican and British dollars, the latter dollars . . . [to be] demonetized as soon as the supply of the new dollars is sufficient to permit of this being done with safety. Under this plan it will be necessary for the Straits to obtain a considerable supply of the new dollars, and as soon as this is received, the new dollars should be made full legal tender concurrently with the Mexican and British dollars, and steps should be taken to put them into circulation. The first supply of new dollars might be obtained . . . by remitting to one of the Indian mints a portion of the coin reserve of the currency commissioners to be melted down and converted into the new Straits dollars, and this process might be continued until practically the whole of the coin reserve is converted into new dollars. . . .

"Simultaneously with the arrival of the first supply of the new dollars and with the making of them legal tender, the import of Mexican and British dollars should be temporarily prohibited and the export of the new dollars should also be prohibited. As there is ordinarily a large import of Mexican and British dollars into the Straits, and subsequent export of them, we think it likely that when their import is prohibited there would be a tendency toward a considerable drain of these coins from the Straits Settlements, and if the new dollars are freely supplied, the

change of currency might be completed without any great delay.

"When the currency is so largely composed of the new dollars as to justify the measure, the Mexican and British dollars should be finally demonetized and the Straits Settlements would then be in the position in which India was when the change of standard was undertaken in that country, with, however, the very important advantage that there would not be an enormous proportion of the new coins either hoarded or circulating in foreign countries, which might, by being thrown into circulation, indefinitely delay the establishment of the gold standard.

"After the Straits Settlements had arrived at this stage, the procedure might be exactly the same as it was in the case of India, *i.e.*, after sufficient Straits dollars had been coined to meet the requirements of business in the Colony and the adjoining States, the coinage of dollars would cease until the exchange value of the dollar had reached whatever value in relation to the sovereign might be decided on by the Government as the future value of the Straits dollar. After this stage is reached the Straits Government would issue the new dollars in exchange for gold, and at the fixed rate.

"When the gold standard is established, it would not be indispensable that any gold coins should be made legal tender in the Colony and the States. But the Government should be prepared not only to give in exchange for a sovereign such a number of dollars as are hereafter declared equivalent to a sovereign, but also to give sovereigns in exchange for dollars at the same rate so long as gold is available, or to give bills on the Crown agents in London based on the fixed rate of exchange."[1]

The Committee expressed the opinion that it was "desirable that the standard of value and the currency of the Straits Settlements and the Federated Malay States should continue to be identical, and they hold the same opinion with regard to Johore."

[1] S. S. Cur. Com. Rep., pp. 12 and 13.

The above recommendations of the Currency Committee were first published in Singapore on May 7, 1903 and were adopted *in toto* by the legislative council on May 29. They accordingly represent the law under which the new currency was established.

Heavy Shipments of Mexican and British Dollars to the Straits

On September 25, 1903 an ordinance was passed authorizing the Governor in Council, subject to the approval of the Secretary of State, to issue an order prohibiting the importing, circulating, or holding in one's possession of certain coins to be specified in the order, after a date fixed therein, under penalty of heavy fines and the forfeiture of the coins thus illegally used or held.

As soon as it became evident that the importation of Mexican and British dollars into the Straits Settlements was likely to be prohibited when the new Straits dollars for which they were to be exchanged began to arrive, sterling exchange rose in the Straits as compared with neighboring countries, and a strong tide of Mexican and British dollars began to flow from Hongkong, the Philippines, China, French Indo China, and other neighboring countries toward Singapore. The market was so flooded with this money that considerable currency exportations were soon found profitable.

New Dollars Placed in Circulation

The new dollars which were coined at the Bombay mint began to arrive early in October 1903. Nearly every boat coming to Singapore from Colombo after the first of October is said to have brought several hundred thousand of them. They were placed in circulation through the instrumentality of the treasury and the banks.

The authorities immediately took steps to effect the sub-

stitution of the new coins for the British and Mexican dollars. On October 2, 1903 there were issued under authority of the "coin import and export ordinance, 1903," two orders in council,[1] the one prohibiting the importation of British and Mexican dollars into the Colony [2] from the third day of October 1903,[3] the other prohibiting the exportation from the Colony of the new Straits Settlements dollars from the same date.[4] As a result of the monetary isolation of the Straits Settlements arising from these orders, merchants experienced for some time considerable difficulty in settling trade balances with other countries.[5]

Old Dollars Demonetized

By the end of the summer of 1904 the bulk of the old currency had been withdrawn from circulation, and on

[1] Cf. Report on Stability of International Exchange, 1903, p. 294.

[2] The Federated Malay States and Johore were excluded from the application of these orders. Ibid.

[3] At a later date, when a considerable part of the old currency was being tied up in the process of recoinage, and there was in consequence a scarcity of currency to meet trade demands, the Government authorized the banks to import certain amounts of British and Mexican dollars for temporary use, on condition that they should be reëxported as soon as the scarcity of money arising from the recoinage should be over. In September 1904 the Governor in Council, in response to an urgent petition of the Singapore Chamber of Commerce, issued an order exempting, until the Chinese New Year, British North Borneo, Labuan, and Sarawak from the operation of the order prohibiting the importation of British and Mexican dollars into the Straits Settlements.

[4] This latter order was evaded to a considerable extent. It is said that several hundred thousand of the new dollars for some time passed back and forth between the Straits Settlements and China. The order was suspended for a time, but was again put into operation on February 13, 1906. At one time about two million of the new dollars were exported to Hongkong, where they brought a premium of between three and four per cent; and at another time, when it was feared that an excessive number of the new dollars had been coined, the Governor permitted the exportation of some five hundred thousand dollars to Hongkong on condition that they be chopped so that they could not be returned. Cf. supra, p. 351.

[5] Cf. Report of the Singapore Chamber of Commerce for the Year 1904, pp. 5, 101–105.

August 31 the Governor, acting in accord with powers granted him under an order in council of June 25, 1903,[1] issued a proclamation removing the legal tender quality from British and Mexican dollars and providing that they should thenceforward not be receivable in payment of government dues. On that date the old dollars ceased to be exchangeable for the new at government offices.

"Thus, [said the chairman of the Singapore Chamber of Commerce, in his address before that body on September 22, 1904,] the second important step has been smoothly and successfully effected, and there is cause for congratulation that the ground has been cleared for the succeeding stages of the currency scheme. The careful guidance of the scheme so far by the Government, notwithstanding its characteristic difficulties, must meet with cordial appreciation on the part of the mercantile community."[2]

The work of withdrawing the old coins and of recoining them was greatly facilitated by the fact that the Government possessed in its currency note reserve a large supply of the old dollars, which it was able to commence shipping immediately to the Bombay mint for recoinage, and by the further fact that it was able to use this reserve as a sort of continuing fund during the entire process of the recoinage.[3] Other circumstances of importance which assisted the Government in expediting the recoinage were the facts that the recoinage was effected at the comparatively near-by

[1] This order will be found printed on pp. 291 and 292 in the Report on the Stability of International Exchange, submitted by the Commission on International Exchange to the Secretary of War, October 1, 1903. Cf. also article on "Money, Weights, and Measures" in the Singapore and Straits Settlements Directory, 1899, App., pp. 19–21.

[2] Ibid., p. 5.

[3] The Government's note guarantee fund consisted in part of coin and in part of securities. The average circulation of government notes for January 1904, which was a typical month, was $16,503,167, and of this amount $10,231,006 was secured by coin. Cf. Report of the Commissioners of Currency for the Straits Settlements for January 1904.

city of Bombay, and that, as the result of the heavy influx of the old dollars in the summer of 1903, the local banks were oversupplied with these coins and shipped them in large amounts to Bombay for recoinage on the account of the Government without interest charge.

Recoinage Completed

The recoinage was completed about November 1904. The total number of British and Mexican dollars sent to the mint to be converted was 35,372,541, and the total number of Straits dollars minted therefrom was 35,400,576.[1] The result of the recoinage was therefore a gross profit of 28,035 dollars, which must be deducted from the total expense of reminting, amounting to 788,180 dollars, thus leaving a net expense of 760,145 dollars.[2] By the end of November 1904 the new dollars had been almost completely substituted for the old in the Colony's circulation,[3] and the Government was confronted with the task of raising the dollar to "whatever value in relation to the sovereign might be decided on" as the permanent gold par.

[1] There was in addition a withdrawal from circulation of about $250,000 in redundant small change, which was recoined into 50-cent pieces.

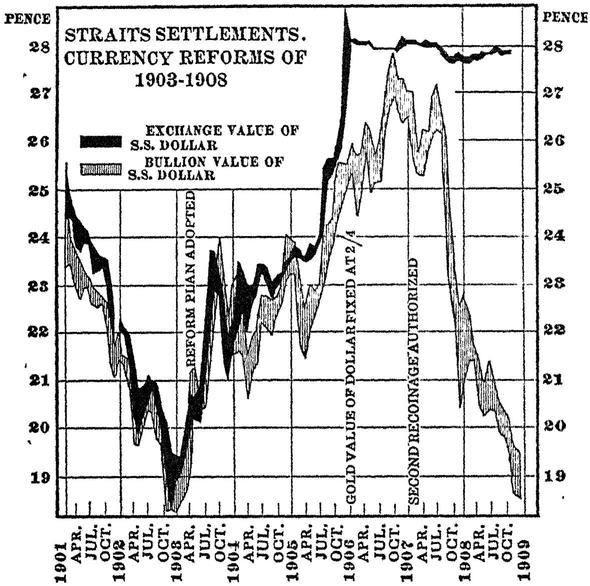
[2] Economist, LXIII, Part II, p. 1672.

[3] Report of the Singapore Chamber of Commerce, 1904, pp. 4–5.

CHAPTER III

Raising the Dollar to Twenty-eight Pence

The course of appreciation is shown in the following chart and in Appendix A.[1]



It will be seen that Singapore rates fluctuated closely in harmony with the price of silver and with Hongkong exchange[2] down to about March 1904,[3] and that from that

[1] Pages 460–61.

[2] Cf. supra, pp. 351–52.

[3] The rise of Singapore exchange above Hongkong exchange and above the bullion value of the dollar between July and October 1903 was due to the

time forward until the fall of 1904 they fluctuated with those rates, although at a considerably higher level. From December 1904 to February 1905 the average bullion value [1] of the Straits dollar was actually higher than the average sterling telegraphic transfer rate in Singapore. The decline in the price of silver in March and April 1905 was not accompanied by an appreciable decline in Singapore exchange, and from that time forward the divorce of the Straits dollar from the silver standard may be considered to have been effective.

On January 29, 1906 the Governor in Council issued an ordinance supplemented by an executive order declaring the sterling value of the new dollar to be two shillings and four pence.[2] Soon after this action had been taken telegraphic rates settled down on a level of $28\frac{1}{8}d.$, and continued on or about that level during the next five or six months. About that time sovereigns were being imported in considerable quantities by the banks, and the result was a fall in sterling telegraphic transfer rates to $27\frac{15}{16}d.$ With the opening of the year 1907 the rate again rose above $28d.$

Before discussing the reasons which led to the adoption of a two shilling and four pence dollar, and the effect of its adoption upon the trade of the Straits Settlements, it will be well to consider briefly the conditions existing in the Straits Settlements during the period while the dollar was being raised.

anticipated redemption of British and Mexican dollars by the Government at par in the new dollar, and, as pointed out previously (supra, p. 404), was the reason for the heavy influx of British and Mexican dollars into the Straits Settlements at that time. The supply finally became so excessive that exchange was forced down below bullion point between October 1903 and January 1904, and the dollars were reëxported in considerable quantities.

[1] By "bullion value" is meant the value of the fine silver content of the dollar in London, according to the London price of standard silver for prompt delivery.

[2] For the procedure followed in "fixing" the value of the dollar, see infra, pp. 416–17.

A Period of Excessive Speculation in Exchange

The depressing influence upon trade of an appreciating unit of value is too familiar to require discussion. Mr. Balfour did not greatly overstate the situation when he declared that a slow appreciation of the standard of value "is probably the most deadening and benumbing influence which can touch the springs of enterprise in a nation." [1] The history of Europe during the dark ages and the history of Europe and America during the period 1873–97 are stock examples of this influence. The appreciation of the Straits dollar differs in many respects from the ordinary example of an appreciating currency. In this case the appreciating unit circulated in a country very limited in area, whose trade was preëminently foreign rather than domestic. The rate of appreciation was very rapid [2] and, unlike those cases of appreciation resulting from a rise in the value of the material from which the money unit is coined, was clearly perceptible to the public.[3]

It is an undisputed fact that the period of appreciation — the period from the summer of 1904 to January 29, 1906, when the sterling par of the dollar was declared — was one of speculative activity, and that in the latter part of this period, that is, after August 1905, the speculation was so widespread and so intense as to interfere seriously with nearly all legitimate business enterprise.

[1] Quoted by Francis A. Walker, The Relation of Changes in the Volume of the Currency to Prosperity, in Discussions in Economics and Statistics, II, p. 235.

[2] Cf. chart p. 408.

[3] The appreciation of the rupee in India is hardly a parallel case. The gold par to be adopted was known in advance, while the amount of the appreciation above the minimum gold value possessed by the rupee prior to the announcement of the Herschell Committee's scheme in 1893 was very small. Cf. supra, pp. 32–33 and 50.

In order to make clear the character of this speculation, a word of explanation concerning the banking business in the Straits Settlements is desirable. The banking business in the Straits Settlements, as well as in the Philippines,[1] Hongkong, Shanghai, and most of the other port cities of the Orient, is largely confined to foreign exchange operations. By contracting in advance for the purchase or sale of exchange at a definite rate, merchants were accustomed to insure themselves against losses from fluctuations in silver during the interim between purchase and sale of merchandise, while the banks in turn protected themselves by covering their forward purchases of local bills by contracts for the forward sales of bank paper and telegraphic transfers, and *vice versa*. An exporter, for example, knowing in January that in the course of a few months he would have a cargo of produce to ship to the London market, went to his banker and made a contract to deliver sometime in the course of the next three, four, or six months, as the case might be, sterling bills covering the value of his anticipated shipment, at a rate of exchange agreed upon. In the Straits Settlements the exporter usually had an option of at least two months, *i.e.*, a right to deliver his bills at any time within two months, and frequently he had an option of five or six months. After the fixing of his exchange the exporter often obtained advances from the bank, usually in the form of an overdraft, secured by the pledge of the produce to be exported. In the same manner importers made contracts months in advance, fixing rates of exchange for the purchase of bank paper or telegraphic transfers with which to make remittances for anticipated importations.

It has been pointed out that, although the sterling rate at which the Straits dollar would be fixed was not declared in advance, as had been the sterling rate in India, in the

[1] A more detailed account of the method is given in the discussion of the Philippine currency reform, supra, pp. 292–98.

case of the rupee in 1893, it was generally believed that a rate of two shillings would be adopted. This appears to have continued to be the popular belief at least as late as the latter part of the year 1904, when the sudden advance in the price of silver made it evident that a two-shilling dollar containing 416 grains of silver .900 fine would be in great danger of the melting pot. Here then was a situation which appeared to the merchant who was inclined to speculate as "a sure thing." The value of the dollar, he reasoned, was bound to rise, and its gold par was certain to be fixed in the probably not distant future at a sterling value materially higher than the one it then had, and at least several per cent higher than its bullion value, whatever might be the price of silver. A merchant contracting in August for the delivery of sterling bills in November or December would have the benefit of whatever appreciation might take place in the dollar in the interim, and, in case his bills should not be ready for delivery at that time, he could presumably cover at a profit by the purchase of bank paper or telegraphic transfers.

As a result of this situation all classes of people began to speculate for a rise in exchange. Sterling bills [1] were offered to the banks in large quantities in the summer of 1905 for forward delivery. Nearly every merchant who had the remotest prospect of having any bills against possible exports during the next six months or so rushed into the market to fix his exchange. Many sales are said to have been made simply on a margin without reference to anticipated exportations. Little attempt was made to cover. Sterling rates naturally rose rapidly as a result of this demand for dollars, and it soon developed that a certain foreign bank was underbidding all the other banks by about one sixteenth of a penny, and was in consequence doing the

[1] There was also considerable speculation on the Indian exchanges, particularly by Indian merchants and the so-called "chitties" or Indian money lenders.

lion's share of the business. This bank, with a branch in Singapore and a sub-branch at Penang, seemed to have under its control a large part of the available supply of dollars. Soon, however, there began to be misgivings as to whether exchange had not gone unreasonably high; all sorts of rumors were afloat; and it was not long before there was a sudden break in the rates, everybody wanted cover, there was a clamor for bank paper and local bills, and down exchange came as rapidly as it had previously advanced. Here likewise the one bank that had done the bulk of the business when exchange was rising overbid its competitors when exchange was falling, and continued largely to control the market. The manager of this bank said to the writer that his plan of operations involved practically no risk. He knew, he said, that the dollar would not be fixed at a lower rate than two shillings, and, when silver rose, that it would be fixed at a considerably higher rate, for the Government would certainly not fix the dollar at a lower value than five or six per cent above bullion point. These facts he appreciated very early, and he was the first to follow them to their logical conclusion. At first for a short time he overbought sterling, anticipating a fall in the price of silver. He began to oversell as early as the fore part of 1904, and early in the spring of that year his over-sales amounted to a very large figure. He kept his heavy figures on this side of the ledger until he gained a virtual control of the market in the summer of 1905, and this control he practically maintained until January 1906.

There were at least seven such cycles of exchange fluctuations of greater or less duration between August 1, 1905 and February 1, 1906. Throughout the month of January 1906 the money market was in a condition of panic, and toward the latter part of the month, about the time of the Chinese New Year, *i.e.*, the 25th and 26th, the panic was feverish and intense. There was at this time the usual

heavy demand for money to meet the Chinese New Year's liquidations,[1] in addition to the demand to meet the many exchange contracts which were then coming due. The bank which during the previous six months had largely controlled the exchange market, which had to some extent dictated terms to the other banks, and upon which speculators had generally relied, found temporary difficulty itself in making collections and in meeting its obligations, and was forced to beg assistance from the other banks in order to take up its contracts. The assistance was finally given, but only on onerous terms. A number of the strongest local houses were threatened with bankruptcy, and it was evident that a supply of dollars must be forthcoming from somewhere or there would be a general collapse.

Exchange rates fluctuated so rapidly during this period — there were sometimes five or six quotations a day — such varying rates were quoted by the different banks, and business was done so extensively on rates different from those publicly quoted, that it is impossible to give any adequate idea of exchange fluctuations for the month. The following figures, however, will give a suggestion of the frenzied state of the market. On January 3 sterling telegraphic transfers were quoted in Singapore at *2s.* $2\frac{3}{4}$*d.*, on January 5 at *2s.* $3\frac{7}{16}$*d.*, a difference of over $2\frac{1}{2}$ per cent; on January 10 the rates cabled to Manila by one bank varied from *2s.* $3\frac{9}{16}$*d.* to *2s.* $4\frac{1}{16}$*d.*, a difference of 1.8 per cent during the day; on January 15 the rate opened at *2s.* $4\frac{7}{16}$*d.* and closed at *2s.* $3\frac{15}{16}$*d.*, a difference of 1.7 per cent; on January 18 the rates cabled to Manila by one bank varied from *2s.* $2\frac{15}{16}$*d.* to *2s.* *4d.*, a variation of nearly 4 per cent during the day.[2] These examples, the writer believes, are

[1] All debts to Chinamen are supposed to be settled by the time of Chinese New Year.

[2] A chart showing the variations in the opening daily rates for the month of January is given in The Straits Settlements Financial Reports and Statements for 1906 (p. 8). It shows that the extremes of the month were

typical. If they give a wrong impression, it is in understating the case rather than in exaggerating it. The manager of one of the leading Singapore banks informed the writer that daily exchange fluctuations in Singapore during January sometimes varied by as much as five per cent. In individual cases, of course, business was transacted at all sorts of extravagant rates.

The excitement became so intense that the Government was finally forced to take action sooner than it had intended. In the latter part of January, when the Governor returned to Singapore from a trip to Labuan, he made a statement before the council, the purport of which is said to have been as follows:

"He had been surprised to learn that, during his absence from the Colony, there had been a sharp rise in exchange, and his opinion was that this was very largely due to speculation upon the intention of the Government with regard to the rate which would ultimately be fixed for exchange between silver and gold. This was a matter which no one was entitled to speculate upon; it was one which the Government was certainly not in a position at present to make a statement about. As every one was aware, the course of the silver market had been so peculiar that it was impossible for the Government at present to say for certain what the market would be six months hence. Six months ago it was 26*d.* Today it was over 30*d.* Would anybody have the boldness to say that six months hence it would not be 26*d.* again, or that it might not be 34*d.*? Under these circumstances, it appeared to him that those persons who were speculating on the intentions of the Government were indulging in a very dangerous operation, in which they might very likely burn their fingers. He could only say that it was the intention of the Government — and he thought this

$26\frac{3}{4}$ on January 2, and $28\frac{11}{16}$ on January 12 — a difference of 7.3 per cent. In six days the rate fell 5.9 per cent, *i.e.*, from $28\frac{11}{16}$ on January 12 to 27 on January 18; it then reacted 3.7 per cent, *i.e.*, to 28 on January 19.

was the opinion of everybody interested in the trade of the place — to fix the dollar at as low a value as possible consistent with security. That was all he was in a position to say on the matter. Whether the point would be higher or lower than the existing rates, he could not at present state; the facts were not before him on which to form an opinion; but he could say that it was the intention and desire of the Government that the dollar should be fixed at as low a value as possible consistent with safety." [1]

In the latter part of January authority was sought of the Home Government to fix exchange immediately. There was some delay, however, in obtaining this authority, and when it was finally received, about January 26, the state of the exchange market was such that it was considered inexpedient to declare the rate at once. On Saturday January 27 the Government sought to steady the market [2] by asking for bids for the cable transfer to London of £100,000. None of the bids received were accepted, but the hint was said to have had the desired effect.[3]

Rate Fixed at Twenty-Eight Pence

On January 29, 1906 the Governor in Council issued an Ordinance declaring that

"it shall be lawful for the Commissioners to issue notes in exchange for gold received by the Commissioners at Singapore at a rate of exchange to be notified by an order of the Governor in Council with the previous approval of the Secre-

[1] Statement furnished the writer by a local manager of one of the large Eastern exchange banks.

[2] This procedure led to considerable unjust criticism of the Government on the ground that, knowing in advance what the fixed rate would be, it was endeavoring to beat the market by taking advantage of the higher market rate then prevailing before declaring its fixed rate. No criticism could have been farther from the truth.

[3] Straits Settlements Financial Report and Statements, 1906, p. 8.

tary of State and the Commissioners may invite tenders for the issue of notes in Singapore against telegraphic transfers in favor of the crown agents for the colonies in London and may at their discretion accept any tender which affords sufficient margin above the rate fixed by such order in council to cover all charges including interest which may be incurred in remitting to Singapore the equivalent in gold at the fixed rates of the notes issued for such tender. . . .

"The sum so received in gold shall form part of the note guarantee fund and may be invested by the Commissioners in accordance with the provisions of this ordinance or used by them for the purchase of silver to be minted into Straits Settlements dollars. . . . Provided that the whole of the profit on such minting shall be carried to a separate gold reserve fund and not form part of the note guarantee fund." [1]

Pursuant to the above ordinance the Governor in Council issued an order on the same day, declaring "that from and after the date of this order the Currency Commissioners may issue notes in exchange for gold received by them at Singapore at the rate of sixty dollars for seven pounds sterling." [2] Two shillings and four pence, the public were accordingly given to understand, would be the permanent sterling par of the dollar, unless future advances in the price of silver should make the raising of the dollar to a higher par seem desirable. The Governor, however, refused to commit himself as to the absolute permanency of the two shilling and four pence par.

With the issuance of the above order the money panic stopped, for it was thenceforth possible to obtain from the Government dollars in unlimited quantities by the presentation of sovereigns in London. When the horizon cleared,

[1] Ordinance No. 1 of 1906, entitled, "An Ordinance further to amend 'The Currency Note Ordinance, 1899.'"

[2] Government Gazette Extraordinary, XLI, No. 5 (January 29, 1906), p. 290.

it was found that several of the principal banks, and one in particular, had large supplies of dollars in their vaults.

Between July 1905 and February 1906 the gold value of about fifty million dollars (inclusive of government notes and of subsidiary and minor coins) had been raised from approximately two shillings to the dollar to two shillings and four pence, an appreciation of over 16 per cent, representing an increment to the gold value of the country's currency during that time of over eight hundred thousand pounds sterling. This advance is in a small degree to be accounted for by the rise in the price of silver; and the increased value of the notes was dependent slightly on the fact that the Government transferred several hundred thousand dollars from the general treasury funds to the note guarantee fund to help make good the decline in the dollar value of the sterling securities held in that fund. The Government had at that time established no gold reserve fund, however, and the above advance is to be explained mostly on the ground of a relative contraction of the currency supply. This difference between the bullion value of the new dollars (at which, approximately, they originally circulated) and their money value — a difference which under other methods of currency reform would have accrued to the public treasury as seigniorage profit and would have furnished a substantial part of a gold reserve fund — found its way largely into the pockets of a few speculators. I say "a few" because here, as in most cases of the sort, the great majority who dabbled in the speculation are said to have lost. A large part of the profits went into the vaults of the foreign bank mentioned above, whose local manager had carefully planned the exploitation of the currency scheme as early as the fall of 1903. This local manager apparently had for the accomplishment of his purpose a large part of his bank's assets, and he played a very shrewd and successful game,

albeit one which would hardly come in the range of ordinary conservative banking.

The Government's action in offering to give government currency notes for sovereigns, at the rate of two shillings and four pence to the dollar, it will be observed, did not necessarily fix the gold value of the dollar, but merely marked an upper limit to its possible appreciation — an upper limit like that established by the Indian Government in June 1893 when it offered to give rupees for sovereigns at the rate of 16 pence.[1] No action was at first taken providing for the giving of sovereigns for dollars, although such action was contemplated as soon as a sufficient supply of gold could be accumulated.[2]

Principle of Gold-Exchange Standard Rejected

The provision of the ordinance of January 29, 1906 authorizing the "issue of notes in Singapore against telegraphic transfers in favor of the crown agents for the colonies in London" was meant to be of a temporary and emergency character. Under ordinary conditions the only method of obtaining dollars from the Government was expected to be through the presentation of the actual sovereigns in Singapore. The Government had no intention (so the Governor informed the writer in February 1906)

[1] Supra, p. 35.

[2] With reference to the subject of the redemption of notes in gold the Governor is reported to have said: "If the Government were to hold out to the public the immediate prospect of giving gold for notes, and some one came along with notes and demanded gold and Government was unable to pay, people would say: 'Here you are holding out that you are prepared to give gold for notes, and the first time you are asked to do so you fail to do it.' They [*i.e.*, Government] must first of all get something of a gold reserve before they could hold out any prospect of being able to give gold in exchange for notes, and that time had certainly not yet arrived. As soon as they had a gold reserve they would be prepared to consider the public as far as possible and give gold for notes when required." Singapore Free Press, January 30, 1906.

of adopting the principle of the gold-exchange standard which had recently been adopted in the Philippines and had been legally authorized for Mexico.[1] It was said that neither the home authorities nor the officials in Singapore were in favor of that plan.

The objections urged in various quarters in Singapore to the adoption of the gold-exchange standard were: (1) That it would unduly interfere with the business of the banks. (2) That it would encourage banks to work on dangerously low cash balances, knowing as they would that they could obtain dollars of the Government on a moment's notice by the purchase of cable transfers on Singapore from the crown agents for the colonies in London. (3) That there would be danger of the Government's notes depreciating unless they were redeemable in gold in the country itself. (4) That the monetary circulation of the Straits Settlements was too small to make the plan feasible there. (5) That the plan would require a larger reserve fund than would otherwise be necessary, because the Government would be compelled to keep a reserve both in London and in Singapore; and that in each place the reserve would have to be large, because drafts on the fund through the sale of telegraphic transfers would not give the Government any such warning in advance of the demands liable to be made as would enable it to replenish the reserve.

The above arguments, all of which were urged upon the writer either by officials or business men in the Straits Settlements, did not appear to be conclusive for the following reasons, which may conveniently be stated in the same order as the objections. (1) If the rates for the sale of government drafts were fixed at the "gold points," as they presumably would be under the gold-exchange standard, and if only drafts of large amounts were to be sold by the Government, redemption by the sale of drafts would

[1] Cf. infra, pp. 531–32.

not interfere appreciably more with the business of the banks than would redemption in coin. Under these circumstances the banks themselves would be the principal purchasers of government drafts, as they had been in the Philippines,[1] and such drafts would be purchased and forwarded merely in lieu of the shipment of sovereigns. (2) The sale of telegraphic transfers, while desirable in the interest of currency elasticity, is by no means a necessary feature of the gold-exchange standard. If the Government were opposed to making a minimum legal reserve requirement of banks, it could limit its sales of drafts to demand drafts or even, if need be, to short-time drafts. (3) If government notes were redeemable in silver dollars on demand, and if the silver dollars were redeemable in gold exchange on demand, depreciation would be impossible in a country where the people had the confidence in the Government which they had in the Straits Settlements. (4) The system of the gold-exchange standard is better suited to a country with a small circulation than to one with a large circulation. It is evidently easier to maintain a small reserve abroad than a large one, and the functioning of a small reserve under the gold-exchange standard is less likely to be a disturbing factor in the money market where the reserve is located. (5) It was not probable that the Straits Settlements would require so large a reserve under the gold-exchange standard as it would under the strict gold standard contemplated. Under either system it would need a sovereign reserve and a dollar reserve. Under the strict gold standard both reserves would be located in Singapore; under the gold-exchange standard the dollar reserve would be located in Singapore and the sovereign reserve in London. The sale of cable transfers is not a necessary part of the system, as above pointed out; and, even if it were, the movement of market rates of ex-

[1] Ann. Rep. Treas. Phil. Islands, 1913, p. 25.

change would ordinarily give ample warning of a demand for dollar drafts or sovereign drafts. Emergency cases, if such should arise, could be met through the temporary transfer of funds to the gold reserve from the security portion of the note guarantee fund, or through the transfer of dollars to the credit of the Home Government in Singapore in exchange for an equivalent amount of sovereigns placed to the credit of the Straits Government in London.[1] A prolonged and severe drain upon the reserve fund, which in a country like the Straits Settlements would be an extremely improbable contingency if the Government withdrew from circulation dollars presented in the purchase of government drafts, could of course always be met by the forward sale as bullion on the London silver market of the redundant dollars piling up in the Government's dollar reserve in Singapore. The gold-exchange standard would probably enable the country to get along with a smaller gold reserve than would the system contemplated, inasmuch as it would keep gold coins out of circulation and the demands upon it would be limited to the requirements of meeting foreign trade balances — the only monetary use to which the dollars could not be applied. The Straits Settlements, inasmuch as it is a country for whose trade requirements silver coins are better adapted than gold, and a country which is anxious to maintain its reserve at as small an expense as possible, would in fact seem to be a place peculiarly adapted to the gold-exchange standard. The premiums which the Government would realize on its sale of exchange, together with the interest it would obtain on that part of its reserve deposited abroad, would doubtless yield sufficient profit, as in the Philippines, to pay the expenses of administering the currency system and to provide in addition a substantial annual increment to the gold reserve.

[1] This is a procedure extensively followed in the Philippine Islands. Cf. supra, p. 368.

Later we shall see how the logic of events forced the Straits Government to adopt the principle of the gold-exchange standard which at this time it contemplated rejecting.[1]

[1] Infra, pp. 450–58.

CHAPTER IV

Results of Raising Dollar to Twenty-eight Pence

Now that the events leading to the declaration of the 28 pence par have been described, it will be well to inquire concerning the effect of the establishment of this new unit of value upon the trade of the Straits Settlements and upon the relations between debtors and creditors and their respective equities.

Domestic Trade

First let us consider the purely domestic trade. It is a principle of monetary science that a sudden alteration in the size of the unit of value does not result in an immediate and proportionate alteration in prices. Custom, which is to the world of people what inertia is to the world of things, tends under such circumstances to conserve existing prices. Time is always required for readjustment of the price level, and the transition from one price level to another often carries with it permanent results of far-reaching consequence. Domestic prices in silver standard countries respond very slowly, if at all, to fluctuations in the market price of silver. A Mexican dollar had nearly the same purchasing power in the domestic trade of the Philippine Islands in February 1903, when it had a gold value of 37 cents United States currency, that it had in October 1901, when it was worth 50 cents. Later, when the bulk of the money in circulation came to be the new money, prices seem to have been quite generally transferred from the old currency to the new

without any material alteration.[1] When the American troops first introduced the United States dollar into the Philippines, the natives demanded as many American dollars for their produce and wages as they were accustomed to receive Mexican dollars, and in some cases they obtained what they demanded. In time, of course, there was a readjustment. In Porto Rico, after the American occupation, the currency of the country, consisting of about 6,000,000 pesos of Spanish money, was retired from circulation by redemption in United States currency at the rate of one and two thirds pesos to one dollar of United States currency. The result was a marked rise in prices as measured in gold values.[2]

The Straits Settlements did not escape the application of this law. Prices and wages did not at once fall in proportion as the sterling value of the dollar rose. When the writer was in Singapore in February 1906 the complaint was heard on every side that the new two shilling and four pence dollar would buy no more in the Straits Settlements than did the old dollar a few years before, when it was worth a little over a shilling and six pence. If this was true, it meant a rise of prices, as measured in gold, of something like 50 per cent within three years. The evidence seems to be that there was considerable truth in the assertion, although it should be said that other forces besides those directly connected with the currency had been pushing prices upward. Wage earners for the most part were receiving in February 1906 about the same number of the new dollars that they had formerly received of the old. The same was true of the salaried class in so far as their salaries were fixed in dollars. Many Europeans, however, a few years before had complained bitterly of the losses they were incurring by reason of the depreciation of the dollar, and had in consequence succeeded in having their salaries transferred to a sterling basis. The raising of the dollar there-

[1] Supra, pp. 344–45. [2] Supra, pp. 213–23.

fore led to a proportionate reduction in the salaries of this class as measured in dollars. Wholesale prices, especially of goods imported from gold standard countries, were showing a strong tendency to decline, and several of the better classes of retail stores were making price reductions on most lines of goods of from five to ten per cent. The great bulk of miscellaneous expenses, such as professional fees, hotel rates, livery rates, laundry charges, and the like, showed no evidence of being affected by the appreciation of the dollar. In general it may be said that the readjustment of prices took place very unevenly; that in no case was there a prompt decline proportionate to the rise in the sterling value of the dollar; that the readjustment was most rapid in those lines where competition was keen, as in the case of wholesale prices, and least so where competition was weak and custom dominant, as in the case of wages. It will be observed that such an uneven alteration of prices must have had important consequences in the distribution of wealth among the different classes in the community.

Foreign Trade

Next let us consider the effect of the raising of the dollar upon the country's foreign trade. This trade may be divided into two parts: (1) the transit trade; (2) the export trade in local products and the import trade in foreign merchandise for domestic consumption.

Transit Trade. The Straits Settlements, commercially speaking, are first of all an *entrepôt* of foreign trade. Singapore is a great distributing center between the East and the West. What sort of influence did the raising of the unit of value exercise on this transit trade?

The actual size of a country's monetary unit, so long as it is stable in value, is a matter of little importance to its foreign trade. Any alteration, however, in the unit of value is likely to have temporarily a detrimental effect on

foreign trade. A period of currency reform is always characterized by a lack of confidence and by unsettled business conditions. Merchants know that important and subtle influences are exercised upon trade profits by alterations in a currency system and they are naturally reluctant to turn their merchandise even temporarily into the money of a country undergoing such a reform. An unfamiliar currency system, no matter how good it may be, is an obstacle to foreign trade. When to these facts it is added, that in this particular case the monetary unit was to be raised artificially after an uncertain interval of time to an unannounced gold par, and ultimately to be maintained at this par by a gold reserve which it might take years to accumulate in sufficient quantity to become effective, it may well be imagined that foreign traders were inclined to be diffident. The writer found that merchants in the Straits Settlements were complaining that the raising of the dollar was driving away the transit trade. There seems to have been such a tendency. It is to be observed, however, that the raising of the dollar was only one of several causes contributing to this result. For some time there had been observed a tendency on the part of oriental countries to deal more and more directly with Europe instead of through ports of *entrepôt*. The "high freights fixed by the Straits Homeward Conference to Europe and extended to New York in August [1905] have contributed in a marked degree to the natural tendency for small ports to expand and establish direct steam communication with home markets."[1] The fact that the raising of the dollar was a force coöperating with other forces tending to reduce the Straits transit trade, or at least to lessen the rate of its growth, diminished the hope that the result would be but temporary.[2] For the

[1] Cf. The [London] Times, Financial and Commercial Supplement, Jan. 22, 1906, p. 41.

[2] The following quotation from the Singapore Free Press of February 8, 1906, concerning the trade with Siam, is apposite: "One of the most in-

next four years, *i.e.*, until 1910, the Straits foreign trade was not satisfactory.[1] The official figures, however, do not differentiate the transit trade from the other trade. This fact and the existence of other disturbing factors, including new regulations in connection with the opium trade with India, make it impossible to draw any safe conclusions from the trade figures as to the long-time influence upon the transit trade of the rise in the Straits dollar.

Export Trade in Local Products and Import Trade in Goods for Home Consumption. It is a generally accepted principle that a falling exchange has a tendency to favor export trade at the expense of import trade, and a rising exchange to favor import trade at the expense of export trade.[2] Prices and wages, as previously observed, respond

teresting features of the Bangkok trade last year was the marked development of a tendency to send orders direct to Europe instead of to the Singapore middleman. In the past, the Chinese importer, a very important factor in the year's total, dealt invariably with Singapore or in a small measure with Hongkong houses. To-day, says the Bangkok Times, 'the saving of the middleman's profit has become a matter of some importance, and notwithstanding Singapore's advantage in being near at hand, the proportion of direct orders in the total has been growing for some time. This tendency has now been accentuated by the exchange difficulty, and it is doubtful if any improvement is to be looked for there.'"

[1] Measured in dollars the total foreign trade of the Straits was as follows. It should be noted that the figures after 1905 are expressed in terms of a dollar more valuable in terms of gold. Figures are in millions.

	Average, 1901–05	1906	1907	1908	1909	1910
Imports	315.5	317.8	322.9	296.6	301.3	345.4
Exports	262.4	281.3	282.2	262.5	267.5	307.7

S. S. Ann. Reps., *passim.*

As noted on the preceding page much of the trade with Siam is transit trade. For the years 1904–08 the trade with Siam and the Siam West Coast (in millions of dollars) was as follows:

	1904	1905	1906	1907
Imports	28.1	30.8	33.5	30.0
Exports	16.4	16.2	18.2	17.8

S. S. Ann. Reps., *passim.*

[2] The rates are assumed to be quoted in terms of foreign money, viz. the number of English pence to the Straits dollar. For discussions of this principle see infra, pp. 479–83, and supra, pp. 24–28.

slowly if at all to alterations in the value of the monetary unit as measured by the foreign exchanges. As a result, in a country like the Straits Settlements, an importer of merchandise from gold standard countries received practically the same number of dollars for his merchandise and paid for it practically the same gold prices for a short time after a rise or fall in exchange as before. If exchange went up, he therefore tended to profit by the higher gold value of the local dollar, and if it went down, *per contra* he tended to lose. The exporter in like manner continued for a time after an alteration in exchange to pay essentially the same wages and the same prices for the produce he exported as before, and to obtain the same gold prices for his exports. He accordingly tended to profit to the extent of a fall in exchange and to lose to the extent of a rise. These gains and losses were of a temporary character, and sooner or later readjustments took place. In the long run the prosperity of the export trade and of the import trade are inseparably linked together, because it is the one that pays for the other. The extent of these temporary profits or losses, as the case may be, the length of time during which they are realized, and the persons to whom they accrue, depend upon the comparative strength of the markets and of the different parties to the transaction. Take, for example, the case of a rising exchange. Where competition among the importers of a given commodity is keen, or where the price in the importing country is for any other reason weak, local prices will soon fall on a rising exchange and the consumer will be the benefited party. Where competition among importers is weak in the importing country, or the price of the commodity is for any other reason strong, the importer will reap the benefit of a rising exchange.[1] Where the sellers of the article in the exporting country are in a position to control the price, either by

[1] In such cases, of course, the profit may be realized in part by the importer, in part by the wholesaler, and in part by the retailer.

combination or otherwise, they may be able to reap the profit by advancing their prices as exchange rises. The same principle applies to the export trade on a rising exchange. If competition among producers is weak and the demand for the commodity in question is strong, the burden of the advance in exchange may be shifted to the buyer or to the foreign consumer. Where the supply of labor employed in the production of the commodity is excessive and the wage earners are not organized, the burden may be shifted to the laborer. Where, on the other hand, the foreign market is weak and the labor supply limited or thoroughly organized, the burden may be shifted to the producer or to the exporting merchant.

Let us apply these principles to the trade of the Malay Peninsula during the period of the appreciation of the dollar. Figures for the price movements of certain staple exports are given below. From them and other evidence the following conclusions may be drawn.

PRICES OF CERTAIN STAPLE EXPORTS[1]

TIN

1905	PURCHASED	PRICE PER PICUL		LONDON PRICE PER TON					
Month	Tons	High	Low	High			Low		
		$	$	£	s.	d.	£	s.	d.
January . .	3539	79.50	77.25	132	10		130	2	6
February . .	1510	77.25	76.50	131			129	12	6
March . . .	2120	80.375	76.625	134	15		129	10	
April . . .	3275	81.625	79.50	136	5		134		
May	2565	80.375	79.00	136	2	6	132	15	
June	2770	81.75	79.625	138	17	6	135	2	6
July	2640	88.00	81.25	150			139	2	6
August . . .	1635	86.875	82.875	151	10		147	5	
September . .	16[illegible]0	83.50	80.125	148			144	12	6
October . . .	2725	82.00	80.00	148	2	6	146	5	
November . .	2775	84.00	80.875	155	15		148	5	
December[2] . .	3320	88.75	83.75	164	10		157		

[1] Based upon the Yearly Statement of the Singapore Chamber of Commerce, 1905.

[2] There was a further increase in the export of tin in 1906 amounting to

BLACK PEPPER

1905	PURCHASED	PRICE PER PICUL		LONDON PRICE PER POUND	
Month	Tons	High	Low	High	Low
		$	$	*d.*	*d.*
January . .	1117	29.25	25.75	$5\frac{7}{8}$	$5\frac{5}{8}$
February . .	935	26.55	25.00	$5\frac{5}{8}$	$5\frac{1}{2}$
March . . .	888	26.50	25.25	$5\frac{5}{8}$	$5\frac{1}{2}$
April . . .	1357	26.375	25.70	$5\frac{3}{4}$	$5\frac{5}{8}$
May	1615	26.25	25.50	$5\frac{3}{4}$	$5\frac{3}{4}$
June	1435	28.625	25.75	$5\frac{3}{4}$	$5\frac{3}{4}$
July	660	29.00	27.30	$5\frac{3}{4}$	$5\frac{3}{4}$
August . . .	938	29.00	28.00	6	$5\frac{13}{16}$
September . .	631	28.25	25.50	6	$5\frac{15}{16}$
October . . .	731	26.375	24.75	$5\frac{15}{16}$	$5\frac{7}{8}$
November . .	499	24.75	23.50	$5\frac{15}{16}$	$5\frac{13}{16}$
December . .	1542	24.00	20.75	$5\frac{13}{16}$	$5\frac{5}{8}$

GAMBIER (not including Cube)

1905	PURCHASED	PRICE PER PICUL		LONDON PRICE PER HUNDRED-WEIGHT	
Month	Tons	High	Low	High	Low
		$	$	*s. d.*	*s. d.*
January . .	2557	9.30	8.75	20	19 6
February . .	882	9.125	8.75	20	19 6
March . . .	2609	9.00	8.75	19 9	19 3
April . . .	1704	9.00	8.60	19 3	19
May	3530	8.85	8.575	19	18 9
June	1959	8.75	8.60	18 9	18 9
July	2189	9.00	8.65	18 9	18 9
August . . .	2312	9.00	8.50	19 9	19 6
September . .	2420	8.75	8.575	19 9	19 9
October . . .	3262	8.45	7.875	19 9	19 9
November . .	3205	8.10	7.875	20 3	19 9
December . .	3973	8.00	7.70	20	20

The rise of the dollar did not, as many anticipated, prove detrimental to the tin trade. Tin is the principal item of

about $8,000,000; the average price per picul for the year being $89.90, an increase of $11\frac{1}{2}$ per cent over that of 1905. S. S. Ann. Report, 1906, p. 14.

export from the Malay Peninsula. The Federated Malay States were contributing about seventy per cent of the world's supply of tin. The production of that staple was constant and the market was strong; as a result the tin merchant was able to shift the burden of the rise in exchange to the foreign consumer. The same was true to a lesser extent of tapioca.[1] On the other hand, pepper and gambier, two important items in the Straits Settlements' export trade, had weak markets during the period of the appreciation of the dollar; and this fact, accompanied by a strong competition among the producers of these articles, resulted in declining dollar prices and the imposing of the burden of the rise in exchange upon the exporter and the producer.

The supply of labor was so scarce in the Malay Peninsula that the raising of the gold value of the dollar did not result in any appreciable reduction in wages among the laborers engaged in the production of articles for export.

The import trade of the Malay Peninsula, aside from the transit trade, is made up of such a variety of commodities and is in the hands of so many traders, that it is impossible to form any very definite opinion as to the effect upon it of the rise in exchange. As in the case of the export trade, different articles were affected differently, according to the conditions of their respective markets and the relative strength of the various parties in the trade. It may safely be said that the import trade received nothing like the stimulus that would naturally have been expected from such a decided rise in exchange, and this for two reasons: (1) the unsettled condition of all kinds of

[1] It is impossible to say what the course of tin and tapioca prices would have been in London, had the value of the Straits Settlements dollar not been raised, and to what extent the producers of these articles might not have realized additional profits under such a contingency. It may well have been that the rise in exchange merely hastened an upward movement of prices which would in time have taken place anyway. It should be noted, moreover, in this connection that exporters of such articles realized in some cases additional profits by speculating in their sterling bills.

business while the currency reform was in progress and, in particular, the unwillingness of merchants to replenish their stocks; and (2) the neglect of normal legitimate business on the part of business men for the purpose of engaging in exchange speculation.

The business of the Straits Settlements during the year can hardly be said to have been slack; it was, on the contrary, at least during the eight months ending January 31, 1906, active and exciting, and the volume of transactions was large; but this activity was principally confined to transactions either purely or largely of a speculative character; and if such transactions are eliminated, it may be safely said that business in the Straits during the period of appreciation was bad. This the writer found to be the general opinion among merchants of the colony. The Singapore correspondent of the London *Times* summed up the situation in his letter of December 1, 1905 by saying: "Not for fifteen years has this Colony experienced such bad times, and even now signs of a revival are by no means hopeful." [1]

Debtor and Creditor

There is perhaps no consideration of more vital importance in any currency reform than that of its effect upon existing debts. A debtor borrows purchasing power in the form of money and, in an ideal system, he would pay back the same purchasing power with interest, except to the extent that prices may have been modified in the interim by factors affecting the production of commodities, such as improved methods, exhaustion of natural supplies, and the like, in which cases the amounts repaid should be so altered that the gains or losses thus arising should be equitably shared between debtor and creditor. While such an ideal

[1] The [London] Times, Financial and Commercial Supplement, January 22, 1906, p. 41.

system is of course unattainable in practice, currency systems should be so framed as to approach the ideal as nearly as practicable. A rapidly depreciating currency works a grave injustice to the creditor class; a rapidly appreciating currency works an even more serious injustice to the debtor class. The bimetallic controversy which stirred up three continents for upwards of a quarter of a century found its *raison d'être* very largely in the injustice to the debtor class resulting from a monetary régime in which the unit of value appreciated by something like 44 per cent[1] in the twenty-five years, 1873–97.

In the light of these familiar principles let us look at the recent experience of the Straits Settlements. The following figures will show in a general way the appreciation of the dollar as compared with gold during the years 1902–05:[2]

Appreciation of the Dollar

	Sterling Telegraphic Transfers			
	High	Low	Mean	Average
	d.	*d.*	*d.*	
1902	$22\frac{3}{8}$	$18\frac{3}{8}$	$20\frac{3}{8}$	—
1903	$23\frac{3}{4}$	$18\frac{7}{8}$	$21\frac{5}{16}$	—
1904	$23\frac{7}{8}$	$21\frac{9}{16}$	—	$22\frac{15}{16}$
1905				
Jan.–June . . .	$23\frac{7}{8}$	$23\frac{7}{16}$	—	$23\frac{5}{8}$
July–Dec. . . .	$26\frac{5}{8}$	$23\frac{13}{16}$	—	$25\frac{9}{32}$

[1] The index number of the Sauerbeck tables for 1873 is 111, and for 1897 is 62.

[2] Sterling exchange figures by months are given in Appendix A, pp. 460–61.

The average annual sterling rates of exchange in Singapore for four-months bank paper for the period 1890 to 1901, as given in the annual reports of the Governor of the Straits Settlements, were as follows:

1890 . .	3*s.*	$5\frac{1}{4}$*d.*	1894 . .	2*s.*	2*d.*	1898 . .	1*s.*	$11\frac{1}{4}$*d.*
1891 . .	3*s.*	3*d.*	1895 . .	2*s.*	$1\frac{1}{2}$*d.*	1899 . .	1*s.*	$11\frac{15}{16}$*d.*
1892 . .	2*s.*	$10\frac{5}{8}$*d.*	1896 . .	2*s.*	$2\frac{3}{16}$*d.*	1900 . .	2*s.*	$10\frac{9}{16}$*d.*
1893 . .	2*s.*	$7\frac{7}{16}$*d.*	1897 . .	1*s.*	$11\frac{15}{16}$*d.*	1901 . .	1*s.*	$11\frac{1}{16}$*d.*

APPRECIATION OF THE DOLLAR IN ITS RELATION TO CERTAIN STERLING RATES

	Percentage Increase of Two Shilling Dollar Over				Percentage Increase of Two Shilling Four Pence Dollar Over			
	High	Low	Mean	Average	High	Low	Mean	Average
1902 . .	7.3	30.6	17.8	—	25.1	52.4	37.4	—
1903 . .	1.1	27.2	12.6	—	17.9	48.3	31.4	—
1904 . .	0.5	11.3	—	4.6	17.3	29.8	—	22.0
1905								
Jan.–June .	0.5	2.4	—	1.6	17.3	19.4	—	18.5
July–Dec. .	−9.9[1]	0.8	—	−5.1[1]	5.2	17.9	—	10.8

A glance at the above table will show that debtors having time obligations in the old currency contracted between the years 1902 and 1906 suffered serious injustice in being compelled to settle those obligations at par in the new dollar. Those persons who contracted debts when the sterling value of the dollar was lowest and invested the borrowed funds in gold standard countries were the heaviest sufferers. Those who contracted obligations when the sterling value of the dollar was highest and invested the proceeds locally, and who settled their indebtedness before prices and wages became adjusted to the new unit of value, suffered least. Between these extremes the injustice suffered was of varying degrees. There were probably few instances of time obligations in the Malay Peninsula in which the debtor was not to some extent deprived of his property unjustly by reason of this artificial increase in the country's unit of value.[2]

[1] Decrease.

[2] In considering the extent of the appreciation of the dollar during the period 1902–06 and the injustice thereby done to the debtor class, allowance should be made for two factors which to a small degree alleviated the situation of that class: (1) Those years were characterized by a slight depreciation of gold in the world's markets, as evidenced by standard tables of price index numbers. (2) Eliminating fluctuations in prices arising from

But, it may be asked, did not the Government take measures to provide for the equitable adjustment of such time obligations?[1] To this question it must be answered that not only was no such action taken, but that there is no evidence that it was ever considered by the Straits Settlements Currency Committee which recommended the plan adopted, by the Governor and legislative councilors who put it into operation, or by the local chambers of commerce which rendered frequent assistance to the Government by their advice and recommendations.[2]

Local officials and business men attempted to justify the Government's policy of inaction in this matter on a number of grounds. The following reply to the criticism above stated was made to the writer by a prominent banker in Singapore, and may be considered as fairly representative of the attitude of most local officials and business men on the subject:

alterations in the unit of value *per se*, the general tendency of local prices was undoubtedly upward in the Malay Peninsula during this period.

[1] Such measures have been taken in recent years in Samoa, Porto Rico, and the Philippines. They have received most careful consideration in the recent discussions concerning monetary reform in Mexico and China.

The Philippine Government, in its currency reform, passed an act for the protection of the debtor class, authorizing debtors having time obligations payable in the old currency to tender payment in the new currency at such a rate of exchange as would fairly represent the value of the old currency in terms of the new on the date the obligations should become due. In determining this rate the debtor was directed to take into account the market price of silver, exchange rates in Hongkong, and various other factors which would be expected to throw light on the gold value the old currency would have had in Manila had it continued to circulate. If the creditor refused to accept the new currency in settlement of the obligation at a rate of adjustment so determined and sought the enforcement of the original contract in any court, the law provided that, upon the establishment of the plaintiff's claim, "it shall be the duty of the court to render judgment for the plaintiff to recover as damages the lawful sum due to him, in Philippine pesos, instead of in the currency mentioned in the contract," the basis for computing the damages being the same as that previously mentioned, according to which the debtor was to compute the amount of his local currency debt in terms of Philippine currency. Cf. supra, p. 339, and infra, pp. 506–508.

[2] One of the members of the legislative council informed the writer that this subject was never discussed by that body.

"No action on the part of the Government for the protection of the debtor class was necessary. Time obligations were contracted in the money of the country without reference to its gold value, and should be paid dollar for dollar in the money of the country which should be legal tender when the obligations became due, regardless of any change that may have taken place in its gold value in the interim."

This argument represents an attitude which is perhaps natural to people who have been in the habit of dealing in a fluctuating currency. Even if it be admitted that persons entering into contracts for the payment of money covering a period of years knowingly assume the risks arising from natural fluctuations in the unit of value, it does not follow that they can justly be expected to bear the burdens resulting from alterations in that unit which are artificial and which they could in no manner have anticipated. In fact, debtor and creditor alike have reason to expect, as a matter of justice, that if the Government finds it desirable materially to alter the unit of value in which existing contracts are stated, it will at the same time see to it that debtors (in case the unit of value is raised) shall either be permitted to pay their obligations in the currency in which they were contracted, or to commute them at equitable rates in the new currency; and that creditors (in case the unit of value is lowered) shall in like manner be legally authorized to insist upon similar terms of settlement. There is no limit to the exploitation of one class for the benefit of another that Governments may sanction by altering the unit of value, if in so doing they pay no regard to the equities of existing contractual relations.

The Government's policy of inaction in this matter was, however, defended on other grounds of a more substantial character, for which due allowance should be made in passing judgment on the course pursued. It was stated that the Straits Settlements are preëminently a trading

country, as contrasted with agricultural and industrial countries, and that the number of long-time obligations was in consequence relatively small. This is probably true, although no figures are available showing the extent to which such time obligations existed. It must be remembered, however, that the new currency was not limited in its circulation to the Straits Settlements proper, but was the money of the Federated Malay States and other dependencies as well, and that the economic activities of these dependencies were not preëminently those of trade but rather of agriculture and mining. The number of such obligations may possibly not have been great in the Straits Settlements currency area as compared with other countries; but that fact gave scant comfort to those who suffered, and their number in the absolute was unquestionably large.

The strongest argument urged in justification of the position taken consisted in the statements that the debtor class in the Malay Peninsula had invested their borrowings principally in that territory, and that their investments were not of a character which are greatly influenced by the sterling value of the dollar; that the two shilling four pence dollar had little more purchasing power within the Peninsula than the old dollar possessed one, two, or more years before; and that any measure which permitted the debtor to pay his debts in a number of new dollars smaller than the number of old dollars called for in the contract would have worked an injustice to the creditor, in so far as he should spend the money received within the territory in which the currency circulated. This argument certainly has weight. There is no question that a law authorizing the commutation of time obligations on the basis of the gold value the British dollar would have had in the Straits Settlements, had its circulation not been discontinued, would in many cases have worked hardship to the creditor class. When due allowance, however, is given to this consideration, the weight of the argument appears

to be in the other direction. The injustice referred to would have affected those creditors only who were paid during the short period of transition while prices were being readjusted to the new unit of value, and it would not have affected all of them, but only such as chose to reinvest their money in the Straits currency area during the short period before prices became readjusted.

It appears, accordingly, that the Straits Settlements currency reform was effected at the cost of a great temporary disturbance to the country's trade, both domestic and foreign, besides the permanent loss of some portion of its transit trade; and that it worked an injustice to the debtor class.

Advisability of a Recoinage in 1905 and of a Two Shilling Par

Without attempting to discuss the question whether it would not have been wise for the Straits to go immediately upon a gold basis instead of following the Indian plan, let us inquire whether it would not have been possible to eliminate largely the evil results experienced, and at the same time to preserve most of the important features of the Currency Committee's plan.

Although the Currency Committee did not state in its recommendations at what sterling par the dollar should ultimately be fixed, the public generally believed, as previously stated, that the par to be adopted would be about two shillings. It may be said authoritatively that this was the par the Currency Committee had hoped would be established, and that in this hope the officials of the Home Country and of the Colony heartily concurred. The definitive adoption of the two shilling par was postponed only because it was feared that the future course of silver might be such as to endanger the melting down of the dollars at that par. The weight and fineness of the dollar, once decided upon, seem to have been assumed to be unalterable.

The silver content of the dollar was the fixed thing, so the Currency Committee appears to have reasoned; the unit of value was the alterable thing; this was to be adjusted to the coin, and to be fixed at such a rate as to allow a safe margin above bullion value.[1] But, one would naturally ask, why not reverse the procedure? The bullion value of properly secured fiduciary coins is largely a question of convenience. The bullion content should of course not be so small as to render the coins inconvenient to handle or to give undue encouragement to counterfeiting, nor so large as to endanger their being melted down. Within these limits, however, the bullion content of a fiduciary coin is a matter of comparative indifference. The unit of value, on the other hand, is a matter of the utmost importance. Alterations in the unit of value, by their uneven effects upon the prices of various classes of commodities and upon wages, and by the derangement they cause in the relations existing between debtor and creditor, profoundly affect the whole economic structure. Variations in the value of the precious metals have frequently compelled countries to alter the weight and fineness of their coins. Within a short time Japan[2] and the Philippines[3] have taken measures in this direction as a result of the rise in the price of silver. The Straits Settlements, however, afford the only instance in recent monetary history of a material alteration in the unit of value deliberately made to meet such a contingency.

Suppose the British authorities had taken this view of the problem, what course would they have followed? In the first place they would probably have announced a two shilling par at the beginning as part of the regular scheme, although such an announcement would not have

[1] Cf., for the attitude of Mexico on this subject, Leyes y Disposiciones Relativas a la Reforma Monetaria (Mexico, 1905), pp. 21–26; also infra, pp. 539–41.

[2] Kemmerer, The Recent Rise in the Price of Silver and Some of Its Monetary Consequences, in Quart. Journ. Econ., XXVI (1912), pp. 261–63.

[3] Supra, pp. 359–62.

been necessary. The procedure would otherwise have been essentially the same as that actually followed down to about November or December 1905. By that time the Government had discontinued redeeming the old dollars and the work of recoinage had been completed. It was at that time, moreover, clearly evident that the silver market was such as to place a two shilling dollar containing 416 grains of silver .900 fine in grave danger of the melting-pot. As soon as this fact was realized the Government would have adopted the course later adopted by the Philippines and Japan; it would have taken measures for the immediate recoinage of the new dollars at a much smaller fine silver content; and, inasmuch as this recoinage would have yielded a substantial seigniorage profit and as there probably would have been some reluctance at first on the part of the public to receive the lighter weight dollar as the equivalent of the old, it would have used this profit as the nucleus of a gold reserve fund, supplementing it perhaps by a temporary draft on the security portion of the note guarantee fund and by the floating of bonds sufficient to make the reserve adequate for immediate use. The new dollars would have been made redeemable in gold or, better, in gold exchange, as rapidly as they were placed in circulation, and dollars would at the same time in like manner have been offered for gold or gold exchange. Under such a procedure there would have been little dislocation of prices; the long period of speculation which so unsettled trade would have been largely eliminated; the status of existing contracts would not have been materially interfered with; and the country would have been established firmly on the gold standard by the autumn of 1905, with a unit of value better suited to its permanent needs than is the present one. Under these circumstances, the rise in the price of silver would have proved a boon to the Straits, as it did to Mexico,[1] rather than a handicap.

[1] Infra, pp. 538–47.

To the above plan, when suggested by the writer to officials and business men in the Straits Settlements, four objections were urged: (1) the difficulty of calling in the new Straits dollars which by the autumn of 1904 had become very widely scattered, many of them having gone outside of the country; (2) the expense of the recoinage; (3) the expense of establishing a reserve; (4) the danger that the public would not accept a dollar of lighter weight.

The first objection was superficial. In the autumn of 1904 the new Straits dollar was nothing more nor less than a silver standard dollar, which the Government had exchanged at par for another silver standard dollar, and which carried its value with it in the silver it contained. The Government had received full value for these dollars when it placed them in circulation, and it would not have been a matter for Government concern if some of the subsequent holders of them should not have been willing or able to exchange them for new gold standard two shilling dollars.

To the objection concerning the expense of recoinage it may be replied that the total expense of reminting 35,372,541 Mexican and British dollars was, according to official figures, $788,180;[1] that had the new coin suggested been made of the weight and fineness of the French five-franc piece (25 grams .900 fine), the Government would have realized on its recoinage if the seigniorage were sold as bullion at 30*d.* per standard ounce, a net profit in Straits dollars of about $2,000,000 or, in sterling, about £200,000 — a substantial beginning for a gold reserve.

To the objection of the expense of establishing a gold reserve fund it should be said that the Straits Settlements had no public debt in the autumn of 1904,[2] that the Colony

[1] Cf. The Reminting of Dollars in the Straits Settlements, in [London] Economist, Oct. 31, 1905, p. 1672.

[2] The Colony shortly afterwards contracted a considerable debt through the seizure, under the right of eminent domain, of the plant of the Tajong Pagar Dock Company.

was prosperous, and that the matter of the floating of a loan of a few hundred thousand pounds for an object so vital to the Colony's welfare should have been considered as a mere bagatelle.

The last objection, viz. that the public would have been averse to receiving a lighter weight coin, deserves more careful consideration. It will be recalled that the scheme of currency reform recommended by the Singapore Chamber of Commerce in August 1897, which contemplated the use of Government currency notes during the period of recoinage,[1] was objected to principally because of the alleged difficulty of inducing the native holders of the old dollars, especially those of the Federated Malay States, to exchange them for a paper currency with which they were not familiar. This difficulty, which appealed strongly to the Straits Currency Committee,[2] and particularly to its chairman, Sir David Barbour, whose opinion was based principally upon his experience in India, was taken less seriously by many of the best informed business men living in the Colony.[3] The following extract from an official report is in point:

"The consent of the home authorities was obtained in 1898 to the issue of a government note currency for the Colony and the Federated Malay States, and steps were taken in that year to design and print the notes. . . . The new notes were first issued on 1st May. [The amount in circulation by July 10 was $1,118,000, and by December 10 it was $3,820,000.] They at once circulated freely throughout the Colony and the Federated Malay States, and the amount issued was only limited by the supplies received from England." [4]

[1] Cf. S. S. Cur. Com., Min. Evid. Apps., pp. 107–10.

[2] Cf. S. S. Cur. Com., Rep., p. 12.

[3] Cf. Report of the Singapore Chamber of Commerce for the Year 1905, pp. v, vi; and The Currency: Singapore Chamber of Commerce Letter to Government, December 17, 1902, p. 5.

[4] Report of the Governor of the Straits Settlements, 1899, pp. 6 and 7.

These government notes at that time, as since, circulated widely throughout the Malay Peninsula. At the close of January 1906 their total circulation amounted to over $17,000,000, and they were extremely popular everywhere. This experience with government notes afforded reason for believing that little difficulty would have been experienced in floating lighter weight silver coins.[1] British administration of the Straits Settlements and of the Federated Malay States had been honest and capable; this the Chinaman, the Malay, and the Indian knew well, and they all had the utmost confidence in the Government. A lighter weight coin backed by the Government and redeemable in gold or gold exchange on demand would in all probability have passed quickly into circulation, although its introduction might have encountered temporarily a slight resistance. This opinion was substantiated by later events.[2]

[1] For a number of years the 25 gram Spanish-Filipino peso circulated throughout the Philippine Islands at par with the 27.07 gram Mexican dollar. It was a popular coin among the Filipinos and the Chinese, and no one seemed to question its value, although the Government never agreed to redeem it in Mexican dollars. Cf. supra, pp. 249–53, and 363.

[2] Infra, p. 449.

CHAPTER V

Rise in the Price of Silver and Measures Taken to Protect the Currency

The new Straits dollar at a money value of 28*d.* had a bullion par of $33\frac{3}{16}$*d.*, that is, with standard silver in London at $33\frac{3}{16}$*d.* per ounce the dollar would have contained 28*d.* worth of pure silver, viz. a dollar's worth. On January 29, 1906, when the 28*d.* gold par was announced, the London price of prompt silver was $30\frac{3}{16}$*d.*, giving the dollar a margin above bullion par of about ten per cent. By October 1906, however, silver reached $32\frac{9}{16}$*d.*, which was within two per cent of bullion par, and the new coins were therefore facing the danger of the melting pot. Something had to be done promptly to protect them. The Government might have met the difficulty by still further raising the gold par; since in fixing the 28*d.* par it had expressly reserved the right to raise the gold par still higher if future advances in the price of silver should make such a course desirable.

The question was before it, said the Acting Treasurer, "whether the margin should be provided by leaving the size and fineness of the dollar as it was and raising its value to say 30*d.* or leaving the value as it was fixed in January, and debasing the dollar. In view of the contracts entered into and the debts incurred on a dollar fixed at 28*d.* so recently as January, and having regard to the obligations of the Government towards their own servants, the Government had no hesitation in adopting the bolder course of adhering to the value fixed and of reducing the bullion value of the dollar."

[1] S. S. Fin. Rep. & Stats., 1906, p. 11.

Secondary Measures for Protecting Currency

Let us first consider secondary measures for meeting the situation, and then the principal one, *i.e.*, recoinage.

The first step, which was taken as early as February 13, 1906, was to put into operation again the order of October 2, 1903 prohibiting the exportation of the new dollars.[1] Such a measure in an *entrepôt* of foreign trade like the Straits Settlements, with a small customs service, would have been very difficult to enforce if the silver value of the dollar should have risen appreciably above bullion par, and was consequently not relied upon as an important factor in the solution of the problem.

The second step was to extend to other money the quality of unlimited legal tender. British sovereigns were made unlimited legal tender[2] and payable in the redemption of government notes at the rate of 28*d.* to the dollar after November 23, 1906. This action was taken "mainly with the object of enabling the Currency Commissioners to prevent any drain on the silver reserve,"[3] of which the greater part was being remitted to England for recoinage. Fifty-cent pieces were made unlimited legal tender, instead of legal tender only to the amount of two dollars as formerly.[4] Being unlimited legal tender they could be paid out by the Government in redemption of its currency notes.[5] It has

[1] The Acting Treasurer estimated that the melting and shipping point was $1\frac{15}{16}$ per cent above the bullion par; this he considered sufficient to cover "cost of transport (freight and insurance) to the purchaser, interest, and the cost of melting and refining to standard bars." S. S. Fin. Rep. & Stats., 1906, pp. 10–11.

[2] Cf. order of King in Council dated October 22, 1906, and order of Governor-General of the Straits Settlements dated November 20, 1906. Thirty-seventh Annual Report of the Deputy Master and Comptroller of the Mint, 1906, pp. 104–105.

[3] S. S. Ann. Rep., 1906, p. 6.

[4] An order to this effect was issued by the Governor-General, November 23, 1906, under authority of an order of King in Council dated October 22, 1906.

[5] Ordinance No. xxvi of 1906, amending sec. 4, par. 3, of The Currency Note Ordinance, 1899.

been observed that the 50-cent piece is a very popular coin in oriental countries.[1] It has a gold value nearer to the standard monetary unit of most European countries than the dollar, and is better adapted to the needs of poor countries than the more customary oriental unit of about twice its value. Inasmuch as two 50-cent pieces contained about $10\frac{1}{2}$ per cent less pure silver [2] than the dollar, they would circulate until silver rose proportionately above the melting par of the dollar. Further, currency notes of the denomination of one dollar were printed and put into circulation. They were made unlimited legal tender, and proved very popular.[3]

Recoinage

The fourth and most important step was that of recoinage. A reduction in the bullion value of the coins could obviously be brought about by (1) a reduction in fineness of the coins, leaving the weight and size unchanged; (2) a reduction in the weight, leaving the fineness unchanged; or (3) a reduction in both weight and fineness — the plan adopted by the Philippines.[4] One of the chief advantages of the first plan was the fact that the size of the coins would be unchanged and the appearance only slightly altered and, as a consequence, the difficulty of bringing the new coins into ready acceptability by the public would be minimized. Against this plan was the obvious objection that a reduction in fineness from .900 to .800 reduced the bullion value of the coins by only 11.1 per cent, and afforded too small a margin of safety in view of the condition and prospects of the silver market. A reduction in the fineness of the dollar much below .800 was metallurgically undesirable. The second or third plans made possible a sufficient reduction in the bullion value of the coins to provide any margin of

[1] Supra, p. 361.
[2] They contained 419 grains of silver .800 fine to the dollar.
[3] S. S. Ann. Rep., 1906, p. 6.
[4] Supra, p. 361.

safety desired, but only at the expense of endangering the acceptability of the coins.

It appears that the Government wavered between the first and second plans. In October 1906 it decided merely to reduce the fineness of the dollar from .900 to .800, leaving the weight unchanged.[1] But, because of the opposition of the Chinese,[2] the Government changed its plan and decided upon a 25 per cent reduction in the weight of the dollar, leaving the fineness unchanged; and a $25\frac{1}{2}$ per cent reduction in the weight of the 50-cent piece, raising the fineness from .800 to .900.[3] An order of the King in Council, dated February 11, 1907, authorized the Governor to fix by proclamation the weight of the new dollar at 312 grains, .900 fine, and that of the 50-cent piece at 156 grains .900 fine.[4] On March 4, 1907 Governor Anderson issued two proclamations[5] providing that the authorized changes in the dollar and the 50-cent piece should go into effect at once. These changes raised the bullion par of the dollar from a London price of silver of $33\frac{3}{16}$*d.* to one of $44\frac{1}{4}$*d.* and that of the half dollar from $37\frac{3}{32}$*d.* to $44\frac{1}{4}$*d.* The new bullion par gives a gold ratio of 21.3 to 1, the same as that of the recoined Philippine peso, a ratio lower than that of either India or Japan.

[1] An order of the King in Council dated October 22, 1906 provided that .800 should be substituted for .900 as the fineness of the dollars coined after such date as may be fixed by the Governor.

[2] "Both the Chinese advisory board and the Chinese chamber of commerce were strongly against any reduction in the fineness of the dollar. . . ." S. S. Fin. Rep. & Stats., 1906, p. 12.

[3] The 50-cent piece, being now a coin of unlimited legal tender, was given the same fineness as the dollar. 37th Ann. Rep. Dep. Master & Comp. Mint, 1906, pp. 106–108.

[4] This order in council also declared that ". . . the Governor of the Colony may at any time, with the approval of the Treasury and a Secretary of State, issue a proclamation fixing for the subsidiary coins below the denomination of fifty-cents . . . a new standard of weight or milesimal fineness or both. . . ." Ibid., pp. 106–107.

[5] These are given in Report of the Director of the United States Mint, 1907, pp. 197–99.

As soon as the recoinage ordinance was issued measures were taken for beginning the work. Large quantities of coin on hand in the currency note reserve were shipped at once for recoinage, and other coins were shipped as rapidly as they could conveniently be withdrawn from circulation, the note reserve being used as a continuing fund to facilitate the operation. During the fiscal year 1907 $10,767,500 of the new coins were received. They were not very popular at first, and at the end of the year over five million of them were remaining in the hands of the Currency Commissioners. One dollar notes were reported to be taking the place to some extent of the silver dollars.[1]

By the end of the year 1909 the recoinage of dollars was practically completed, the total amount of new coins received being $19,006,872, "showing a surplus of $4,751,898 over the amount sent for reminting," [2] and yielding a gross profit of 33⅓ per cent. The increased supply of coins which would have resulted from the recoinage of all the old dollars would have been much larger than the needs of the country; and accordingly $3,000,000 were sold as bullion in 1907 (in addition to $1,000,000 of surplus subsidiary silver, including $106,000 in 50-cent pieces),[3] and $12,778,213 in 1910. From the 1910 sales $9,363,070 was realized, showing a loss from face value of about 27 per cent. The net profits upon the recoinage were turned into the Gold Standard Reserve Fund.[4]

[1] S. S. Fin. Rep. & Stats., 1907, p. 7.
[2] Ibid., 1909, p. 6.
[3] Ibid., 1907, p. 8.
[4] This fund, which will be described later (p. 458), was created by section 73 of Ordinance No. i of 1906.

CHAPTER VI

Adoption of Gold-exchange Standard

It has been noted previously [1] that although there was a provision in the ordinance of January 29, 1906 authorizing the issuance in Singapore of notes against telegraphic transfers in favor of the crown agents for the colonies in London, this provision referred merely to exchange in one direction, was looked upon as a temporary measure, and that as late as the latter part of February 1906 the Government had no intention of adopting the principle of the gold-exchange standard as a regular and permanent method of maintaining the gold parity of its currency. How in the Straits, as previously in India,[2] the logic of events caused the stone which the builders rejected to become the head of the corner we shall now see. To understand this development it will be necessary to describe briefly the Straits currency note system; for it was out of this system that the Straits gold-exchange standard developed, and it is chiefly through the currency note reserve officially known as the Note Guarantee Fund and not, as might more naturally be expected, through the Gold Standard Reserve,[3] that the gold-exchange standard functions.

The Straits Settlements Currency Notes

The Straits currency notes of to-day, which represent by far the larger part of the circulating medium, are based upon the Currency Note Ordinance of 1899 and its nu-

[1] Supra, pp. 416–20.
[2] Supra, pp. 100–104, 117–18, 122 and 127–29.
[3] Infra, p. 458.

merous subsequent amendments.[1] This Ordinance authorized the issuance of currency notes which should "be a promise on the part of the Government of the Straits Settlements to pay the bearer on demand the amount named therein," and provided that the amount required for such payment should be a charge on the moneys and securities in the hands of the Currency Note Commissioners. These Commissioners who were to constitute a board for the administration of the ordinance consisted of "the persons for the time being lawfully discharging the duties of Colonial Secretary and Treasurer and of one other person nominated by the Governor." The notes were made unlimited legal tender.[2] For the maintenance of their parity with the silver dollar a Note Guarantee Fund was created to be held in the Colony by the Commissioners. This Fund was divided in two parts: a coin portion which should be fixed at not less than two thirds of the Fund,[3] and an invested portion which should consist entirely (or chiefly) of British and colonial government securities. If the coin in the Fund should at any time fall below the fixed proportion established by the ordinance, the Commissioners were required to make up the deficiency by the sale of securities from the invested portion.[4] Part of the income from the securities was to be carried to a depreciation fund until such a time as any depreciation that might have oc-

[1] Amendments Nos. xiii of 1903, iv of 1904, iii of 1905, i, v, xxiii, and xxvi of 1906, and xxvii of 1908.

[2] They were not legal tender for payments by the Commissioners at their office, nor for payments by banks in the redemption of their bank notes. The law provided that one dollar notes should be legal tender only up to ten dollars. One dollar notes, however, were not issued until the latter part of 1906 and then they were made unlimited legal tender. Supra, p. 447.

[3] Under certain conditions, the coin portion might be reduced from two thirds of the Fund to one half, by the Governor, with the consent of the Secretary of State in London.

[4] There were some later qualifications to this rule, the chief of which for our purposes was a waiving of the rule in the case of a deficiency in the coin portion resulting from the temporary withdrawal of coin for purpose of recoinage. Cf. Ordinance No. xiii of July 3, 1903.

curred in the securities should be made good and until a fund equal to at least 10 per cent of the invested portion of the Guarantee Fund should be accumulated.

Decline in Dollar Value of Note Guarantee Fund

The currency notes proved to be very popular, and by the year 1903, the year in which the currency reform was inaugurated, the average monthly circulation was over fifteen million dollars. With the raising of the Straits dollar to a 28*d.* basis there was obviously a proportionate shrinkage in the dollar value of the securities in the Guarantee Fund, including also those in the depreciation fund. The assets held by the Currency Commissioners were accordingly reduced, while the liabilities in the form of notes in circulation were not affected. For November 1906 the Commissioners reported the value of the securities in the Note Guarantee Fund "calculated at the latest known market rates of November 1906" at \$8,011,066, and the original cost of these securities at \$9,948,816, showing a difference of \$1,937,750 or 19½ per cent. The November 1906 value of the securities in the depreciation fund was \$267,301, and their original cost was \$333,539, a difference of \$66,238 or approximately 20 per cent.[1] While this depreciation was due chiefly to the raising of the sterling value of the dollar, a 28*d.* dollar being nearly 17 per cent more valuable in terms of gold than a 2*s.* dollar, for example, it was due to a small extent also to a decline in the average sterling value of the securities since the date of their purchase.

By using the depreciation fund, making substantial contributions from general revenues,[2] and taking all the current net income from the securities,[3] the Government suc-

[1] S. S. Fin. Rep. & Stats., 1906, last page.
[2] Ibid., p. 6.
[3] Ordinance No. v of 1906.

ceeded by June 1906 in reducing the deficiency in the invested portion to $757,697, and by June 1910 to $443,104.[1]

Beginnings of Gold-Exchange Standard

We are now in a position to consider the use of this Note Guarantee Fund in connection with the development of the gold-exchange standard. As previously noted,[2] the ordinance and order in council of January 29, 1906 that fixed the gold value of the Straits dollar at 28*d.* authorized the Currency Commissioners to give notes in exchange for gold at Singapore at the rate of 28*d.* and to accept tenders for the issue of notes in Singapore against telegraphic transfers in favor of the crown agents for the colonies in London[3] provided that such tenders should provide sufficient margin above the 28*d.* rate to cover all charges including interest which might be incurred in remitting this gold to Singapore. The gold so received both in London and in Singapore was to go into the Note Guarantee Fund to be used by the Commissioners for the coinage of more dollars,[4] for the purchase of securities for the investment portion of the fund, and ultimately for redemption purposes.[5]

"No advantage was taken by the banks of the facilities afforded them by the new ordinance to obtain a supply of local currency by sale of telegraphic transfers to Government, and gold was not tendered to the Currency Commis-

[1] S. S. Fin. Rep. & Stats., 1906, p. 6; and ibid., 1910, p. 5.

[2] Supra, pp. 416–17.

[3] By Ordinance No. iv of March 18, 1904 and again by Ordinance No. iii of March 17, 1905, both promulgated before the Straits currency had attained a gold basis, the Currency Commissioners in Singapore were authorized to issue notes in exchange for gold deposited in London or with the Commissioners at Singapore, at rates to be officially determined. The writer has seen no evidence of any such gold deposits having been made prior to March 1906.

[4] The profits on the coinage were to be turned over to a separate Gold Standard Fund created by Ordinance No. iii of March 17, 1905.

[5] Supra, p. 419.

sioners in any considerable quantity until April, although a large amount was available in the Colony." [1]

Gold was first tendered to the Commissioners for notes about the end of March, and by the end of August the amount in possession of the Commissioners was £954,730.[2]

The Government, however, had little need of a large supply of gold coin in the vaults of the Currency Commissioners in Singapore. It had not yet committed itself to redeem its currency in gold. The invested portion of its Note Guarantee Fund needed to be greatly increased in view of the great increase in the note circulation from $17,215,280 at the end of March 1906 to $24,786,105 at the end of August. Furthermore, in view of the deficiency in this Fund arising from the raising of the dollar to *28d.*, it was but natural that the Government should want to buy the securities promptly so as to yield the largest possible income. For the purchase of securities, however, the Fund needed to be in London, not in Singapore. Such a heavy demand for notes, moreover, was liable soon to lead to the necessity of purchasing more silver for coinage, and for this purpose likewise the funds would not be needed in Singapore but in London. The Commissioners accordingly shipped £210,000 to London for investment, and remitted to London through one of the banks approximately the same amount, £100,000 of which was invested and the balance of which was drawn against for the redemption of notes in Singapore. It was becoming more and more obvious that it was a cumbersome and needlessly expensive procedure to encourage the payment of gold coin to the

[1] S. S. Fin. Rep. & Stats., 1906, p. 9.

[2] Ibid.

The first appearance of gold in the monthly statements of the Commissioners is in that of March 31, 1906, the amount being £1700. For the last day of subsequent months of 1906 the gold held was as follows: April, £158,221; May, £482,412; June, £767,354; July, £893,039; August, £954,730; September, £744,730; October, £623,511; November, £453,334; December, £127,169.

Commissioners in Singapore in exchange for notes, requiring the shipment of gold to the Straits, only to have it shipped back to London again at the Colony's expense.

The genii of the gold-exchange standard seemed determined to make a thoroughgoing demonstration of the advantages of their system; for the gold in the Note Guarantee Fund and the local currency in the banks and in circulation having reached their maxima in August, the tide began to turn in the opposite direction, and exchange rates declined to a lower level. The Government, anticipating the danger of an undue depreciation in the dollar, which had only a few months before reached its 28*d.* par, passed an ordinance in August authorizing the Commissioners to issue gold in exchange for notes, and to sell telegraphic transfers on the crown agents in London at a margin sufficiently below the 28*d.* par to cover all charges, including interest incurred in remitting gold from Singapore to London.[1]

"During the latter part of November, and in December, there arose a large demand for gold in India and the banks drew on the gold in the possession of the Currency Commissioners for the purpose of shipment to India. Altogether £407,162 were taken out of the currency reserve for export to that country. As reminting operations were in progress and the Straits dollars in the currency note reserve were required for shipment to England, the Currency Commissioners refrained [for a time] from exercising the discretion they possessed under the Ordinance to give either gold or silver in exchange for notes tendered." [2]

But when in December the limit of £125,000 of gold in the Note Guarantee Fund was reached the Commissioners refused further to issue sovereigns in exchange for notes. Special means, however, were taken further to contract the currency so as to relieve the redundancy.[3]

[1] Ordinance No. xxiii of 1906. Cf. also infra, p. 459.
[2] S. S. Fin. Rep. & Stats., 1906, p. 9. [3] Ibid., pp. 9-10.

Through Ordinances i and xxiii of 1906 the Straits Government had now provided means of selling drafts on reserves belonging to the Note Guarantee Fund, both in London on Singapore and in Singapore on London, and drafts in both directions were sold during the year. In this way the Government had introduced the essentials of the gold-exchange standard. The Acting Treasurer in his report dated June 18, 1907 gave the following statement of the Government's intentions:

"The factors which determine the limits of the variations of the sterling value of the dollar are the cost to Government of bringing out gold to Singapore and the cost of sending gold to the central market of the world viz.: — London. The intention of the Government is, in the case of any dearth of currency and in the event of gold not being available in the Colony, to issue notes by buying telegraphic transfers payable to the crown agents in London, and, in the case of any excess of currency and in the event of the currency gold reserve being exhausted, to draw in notes by selling telegraphic transfers payable by the crown agents in London. These limits have been fixed at $28\frac{5}{16}d.$ (buying) and $27\frac{11}{16}d.$ (selling) and they provide a sufficiently liberal margin for all contingencies including freight, insurance, packing, shipping charges and interest. They will, therefore, mark the extreme high water and the extreme low water limit to the sterling value of the dollar and the Government may be expected to actively intervene whenever the dollar is within measurable distance of either of these limits." [1]

This is a clear declaration of the Government's intention to apply the principle of the gold-exchange standard whenever conditions in the Colony were not favorable for the Currency Note Commissioners to pay out gold coin in exchange for notes and notes in exchange for gold coin.

[1] S. S. Fin. Rep. & Stats., 1906, p. 10.

On December 2, 1908 there were passed some important amendments to the Currency Note Ordinance of 1899, which have a bearing upon the functioning of the Straits gold-exchange standard.[1] These amendments provided that "the proportion of gold to silver in the coin portion of the [Currency Note Guarantee] Fund shall as soon as practicable be raised to two of gold to one of silver," and that a part of the coin portion of the Fund as well as the invested portion might be kept with the crown agents for the colonies in London. It reaffirmed the provisions of the Currency Note Amendment Ordinances of 1906,[2] with some slight changes, concerning the sale of exchange by the Commissioners in Singapore upon that part of the Note Guarantee Fund which was held by the crown agents for the colonies in London. Straits dollars, 50-cent pieces (which were now unlimited legal tender[3]), and currency notes were made receivable by the Commissioners in payment for such drafts, and the premiums were to be based, as previously, upon the shipping expenses for sovereigns between Singapore and London. The money received in Singapore in payment for the drafts was to be withdrawn from circulation so as to contract the currency, and was to be held in the custody of the Commissioners. On the other hand, dollars, 50-cent pieces, and notes were made payable in the Colony in exchange for sovereigns paid into the Note Guarantee Fund with the crown agents for the colonies in London,[4] a sufficient premium being charged to cover the cost of shipping sovereigns from London.

[1] Cf. Ordinance No. xxvii of 1908.

[2] Supra, pp. 416–17.

[3] Supra, pp. 446–47.

[4] A new feature of this purchase of sterling exchange was introduced by the Currency Note Commissioners, September 15, 1909 (under authority of ordinance No. xxvii of 1908). Under it the Commissioners are prepared to purchase sovereigns in transit from Australia to England, payment being made "at 28d. seventeen days after the departure from Freemantle of the vessel in which the sovereigns are shipped on receipt of telegraphic instructions from the crown agents." S. S. Fin. Rep. & Stats., 1909, p. 6.

The premiums realized on this exchange, as likewise the net profits realized on the recoinage, were to accrue to the Gold Standard Reserve.[1] This Reserve, which is an invested fund, has little direct importance to the functioning of the gold-exchange standard. It serves chiefly as a sort of secondary reserve and guarantee fund for the maintenance of the gold parity. As previously observed, it is through the Note Guarantee Fund that the gold-exchange standard chiefly[2] functions.

How the Gold-Exchange Standard has Worked

The Straits Settlements differ from the Philippines[3] in experiencing normally a substantial variation in exchange rates during a calendar year.[4] In the Straits, therefore, the gold-exchange system normally functions in both directions, although it happens in some years, as for example in 1910, that exchange rules strongly in one direction and that all the drafts sold by the Currency Note Commissioners are in that direction.

Nearly every year gold coin is received by the Currency Note Commissioners in the Colony in exchange for notes given out; and likewise gold is given out in exchange for notes tendered. None the less by far the larger part of the gold portion of the Note Guarantee Fund is kept with the crown agents for the colonies in London, and this

[1] Supra, p. 449.

[2] There is an emergency provision in the Ordinance of 1908 that: "Subject to the sanction of the Governor it shall be lawful for the Commissioners, whenever it may be deemed necessary, to make use of any portion of the Gold Standard Reserve in the payment of currency notes."

For a similar situation in India, see supra, pp. 100–108, 117–120, and 135–38.

[3] Cf. supra, p. 368.

[4] The range of demand rates for the years 1908–10 were:

Year	High	Low
	s. d.	*s. d.*
1908	2 4	2 3⅝
1909	2 4 3/16	2 3⅜
1910	2 4 3/16	2 4⅛

proportion appears to be a growing one. The figures for the gold received and paid out since 1907 so far as at present available are as follows:

Year	Gold Received	Gold Paid Out	Year	Gold Received	Gold Paid Out
	£	£		£	£
1907	262,834	218,874	1910	307,090	43,300
1908	—	179,900	1911	556,312	703,998
1909	112,180	95,970	1912	608,505	698,545

S. S. Fin. Rep. & Stats., *passim.*

The chief reason why such substantial quantities of gold are tendered for notes to the Commissioners in Singapore is probably the fact that the Government's "import point" for the sale of drafts on the Fund in Singapore, *i.e.*, 28$\frac{3}{16}$*d.*, is under normal circumstances too high. Inasmuch as the banks have more than once been able to lay down gold in Singapore from London at 28$\frac{1}{8}$*d.*, they naturally at such times choose that method of obtaining currency in the Straits to the method of purchasing drafts. Under these conditions it would seem wise for the Straits Government to reduce their normal rate for the sale in London of dollar drafts on the Fund in Singapore to 28$\frac{1}{8}$*d.*

In a colony like the Straits Settlements, well supplied with a sound government-note currency of convenient denominations in which the public have full confidence, with an ample supply of silver coins, and with good banking facilities, there is little justification for trying to keep gold coin in circulation. For purposes of maintaining the parity of the fiduciary unit with gold, and of regulating the currency supply to trade demands, the sale of drafts under the system of the gold-exchange standard is more efficient and less expensive. A still greater dependence upon this system in the Straits, rather than upon the direct use of gold in the Colony, would seem desirable. At present the tendency seems to be in that direction.

APPENDIX A

Rates of Sterling Exchange in Singapore Compared with Rates in Hongkong and with the Bullion Value of the British and the Straits Dollar

Date	Silver[1]		Hongkong Sterling Exchange			Singapore Sterling Exchange					
	Average Price of Standard Silver in London	Average Bullion Value of British Dollar[2]	Telegraphic Transfers			Telegraphic Transfers			Four Months Bank Paper		
			High	Low	Average	High[3]	Low[3]	Average[4]	High	Low	Mean
1902	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
January	25 11–16	21 21–32	22 3–8	22	22 3–32	22 3–8	22 1–16	(22 7–32)	22 11–16	22 5–16	22 1–2
February	25 7–16	21 7–16	22	21 7–8	21 31–32	22 1–8	22	(22 1–16)	22 3–8	22 1–4	22 5–16
March	25	21 3–32	21 15–16	21 5–16	21 1–2	22	21 3–8	(21 11–16)	22 1–4	21 5–8	21 15–16
April	24 3–8	20 17–32	21 3–8	20 1–8	20 13–16	21 7–16	20 1–4	(20 27–32)	21 11–16	20 1–2	21 3–32
May	23 11–16	19 31–32	20 11–16	19 7–8	20 3–16	20 13–16	19 13–16	(20 5–16)	21 1–16	20 1–16	20 9–16
June	24 5–32	20 13–32	20 13–16	20 5–16	20 9–16	20 7–8	20 1–4	(20 9–16)	21 1–8	20 1–2	20 13–16
July	24 3–8	20 9–16	20 7–8	20 7–16	20 23–32	21 1–8	20 1–2	(20 13–16)	21 3–8	20 3–4	21 1–16
August	24 7–32	20 7–16	20 13–16	20 11–16	20 3–4	21	20 13–16	(20 29–32)	21 1–4	21 1–16	21 5–32
September	23 7–8	20 1–8	20 13–16	20 3–8	20 9–16	20 15–16	20 3–8	(20 21–32)	21 3–16	20 5–8	20 29–32
October	23 13–32	19 23–32	20 3–8	20	20 1–8	20 7–16	20	(20 7–32)	20 11–16	20 1–4	20 15–32
November	22 13–16	19 7–32	19 15–16	18 1–2	19 13–32	20 1–8	18 1–2	(19 5–16)	20 3–8	18 3–4	19 9–16
December	22 3–16	18 11–16	19 1–4	18 11–16	18 31–32	19 1–2	18 3–8	(18 15–16)	19 3–4	18 5–8	19 3–16
Year	24 3–32	20 5–16	22 3–8	18 1–2	20 5–8	22 3–8	18 3–8	(20 3–8)	22 11–16	18 5–8	20 21–32
1903											
January	22 1–16	18 19–32	19	18 3–4	18 27–32	19 7–16	18 7–8	(19 5–32)	19 11–16	19 1–8	19 13–32
February	22 3–32	18 19–32	19	18 3–4	18 13–16	19 3–8	19	(19 3–16)	19 5–8	19 1–4	19 7–16
March	22 1–2	18 15–16	19 1–4	18 13–16	19 1–32	20 1–8	19 3–8	(19 3–4)	20 3–8	19 5–8	20
April	23 9–32	19 5–8	20 5–8	19 3–16	19 9–16	20 11–16	19 7–8	(20 9–32)	20 15–16	20 1–8	20 17–32
May	24 29–32	21	20 7–8	19 7–8	20 7–32	20 11–16	20 3–16	(20 7–16)	20 15–16	20 7–16	20 11–16
June	24 13–32	20 9–16	20 3–16	19 7–8	20 1–16	20 7–8	20 1–8	(20 1–2)	21 1–8	20 3–8	20 3–4
July	24 13–16	20 15–16	21	20	20 9–16	22 1–16	20 7–8	(21 15–32)	22 5–16	21 1–8	21 23–32
August	25 9–16	21 17–32	22 1–2	21 1–8	21 25–32	23 3–4	21 13–16	(22 25–32)	24	22 1–16	23 1–32
September	26 3–4	22 17–32	22 3–4	21 15–16	22 5–16	23 3–4	22 7–8	23 5–16	24 1–16	23 3–16	23 5–8
October	27 7–8	23 1–2	22 9–16	22 1–8	22 11–32	23 5–16	22 13–16	23 1–32	23 5–8	23 1–8	23 3–8
November	27 1–32	22 25–32	22 1–16	20 7–8	21 1–2	22 7–8	21 7–16	22 7–32	23 3–16	21 3–4	22 15–32
December	25 3–4	21 23–32	20 7–8	20 3–8	20 19–32	21 15–16	20 15–16	21 9–32	22 1–4	21 1–4	21 3–4
Year	24 3–4	20 7–8	22 3–4	18 3–4	20 15–32	23 3–4	18 7–8	(21 5–16)	24 1–16	19 1–8	21 19–32

1904											
January	26 7-16	22 9-32	22 3-4	20 7-8	21 27-32	22 5-16	21 9-16	22	22 5-8	21 7-8	22 1-4
February	26 9-16	22 13-32	23 1-4	21 3-4	22 17-32	23 9-16	21 15-16	22 29-32	23 7-8	22 1-4	23 1-16
March	26 1-4	22 1-8	22 1-2	21 7-16	22	23 1-4	22 7-16	23	23 9-16	23 1-4	23 13-32
April	24 31-32	21 1-16	21 3-4	20 5-8	21 1-4	22 15-16	21 15-16	22 15-32	23 3-16	22 1-4	22 23-32
May	25 3-8	21 3-8	21 3-4	21 5-16	21 9-16	22 15-16	22 1-2	22 23-32	23 3-16	22 3-4	22 15-16
June	25 19-32	21 19-32	22 1-8	21 9-16	21 25-32	23 7-16	22 3-4	23 1-8	23 11-16	23	23 11-32
July	26 23-32	22 17-32	22 7-16	22	22 3-16	23 7-16	23 1-4	23 11-32	23 11-16	23 5-8	23 21-32
August	26 21-32	22 15-32	22 5-8	21 9-16	21 31-32	23 3-8	23	23 1-4	23 5-8	23 5-16	23 15-32
September	26 11-32	22 7-32	22 3-16	21 5-8	21 7-8	23 1-16	22 11-16	22 7-8	23 3-8	23	23 3-16
October	26 3-4	22 9-16	22 3-16	21 15-16	22 1-16	23 3-16	22 15-16	23 1-32	23 1-2	23 1-4	23 3-8
November	26 15-16	22 23-32	22 13-16	22 1-4	22 7-16	23 1-4	23 3-16	23 7-32	23 9-16	23 1-2	23 17-32
December	27 7-8	23 1-2	23 9-16	22 13-16	23 3-32	23 1-2	23 1-4	23 13-32	23 13-16	23 9-16	23 11-16
Year	26 7-32	22 1-8	23 9-16	20 5-8	22 1-16	23 7-8	21 9-16	22 15-16	23 7-8	21 7-8	22 7-8
1905											
January	27 31-32	23 9-16	24 1-16	23 7-16	23 21-32	23 9-16	23 7-16	23 15-32	23 7-8	23 11-16	23 25-32
February	28 1-16	23 21-32	23 11-16	22 5-8	23 3-16	23 13-16	23 9-16	23 11-16	24 1-16	23 13-16	23 15-16
March	26 7-8	22 21-32	22 5-8	22 1-16	22 7-16	23 3-4	23 9-16	23 5-8	24	23 13-16	23 29-32
April	26 1-16	22	22 7-16	21 13-16	22 3-16	23 9-16	23 7-16	23 15-32	23 13-16	23 11-16	23 3-4
May	26 5-8	22 15-32	22 3-4	22 5-16	22 1-2	23 7-8	23 1-2	23 11-16	24 1-16	23 11-16	23 7-8
June	26 15-16	22 23-32	22 5-8	22 1-4	22 15-32	23 13-16	23 5-8	23 23-32	24 1-16	23 7-8	23 31-32
July	27 5-32	22 7-8	22 3-4	22 7-16	22 19-32	24 1-16	23 13-16	23 7-8	24 5-16	24	24 5-32
August	27 3-4	23 3-8	23 3-8	22 5-8	22 15-16	25 7-16	24 1-16	24 7-8	25 11-16	24 1-4	24 31-32
September	28 17-32	24 1-16	23 7-16	22 15-16	23 9-32	25 5-8	25 3-16	25 11-32	25 7-8	25 7-16	25 21-32
October	28 5-8	24 1-8	23 11-16	23 3-16	23 7-16	25 5-8	25 5-16	25 15-32	25 15-16	25 5-8	25 25-32
November	29 13-32	24 13-16	25 1-8	23 5-8	24 15-32	26 1-16	25 5-8	25 7-8	26 7-16	25 15-16	26 3-16
December	29 31-32	25 5-32	25 1-16	24 1-4	24 17-32	26 5-8	25 15-16	26 3-16	26 15-16	26 1-4	26 19-32
Year	27 27-32	23 7-16	25 1-8	21 13-16	23 1-8	26 5-8	23 7-16	24 7-16	26 15-16	23 11-16	25 5-16
1906											
January	30 1-8	25 13-32	24 13-16	24 1-4	24 17-32	28 3-4[4]	26 5-8[4]	27 7-8			

[1] Figures for the period from January 1902 to June 1905 were taken from Kemmerer, Sec. Ann Rep Chief Div. Cur. Phil. Islands, pp. 27-28; figures for the period subsequent to June 1905 are based on an extension of the figures contained in that report.

[2] The British dollar and the first of the new Straits dollars each contained 416 grains of silver .900 fine

[3] Figures are based on the statements of Singapore rates of exchange issued by Fraser and Company, brokers of Singapore. Inasmuch as these statements are issued only on the dates of the outgoing European mails there is a certain overlapping at the beginning and end of each month

[4] These averages were computed by the writer from telegraphic rates furnished daily by the Manila branch of the Hongkong and Shanghai Banking Corporation. Figures in parentheses represent mean rates instead of average rates.

APPENDIX B

Principal References Cited

Chalmers, Robert. A History of Currency in the British Colonies. London: Eyre and Spottiswoode, 1893.

Colonial Office List. Annual. London: Waterlow & Sons, Ltd.

Commissioners of Currency for the Straits Settlements. Monthly Reports. Singapore: Government.

Commission on International Exchange. Report on the Introduction of the Gold-Exchange Standard into China, the Philippines, Panama, and Other Silver Standard Countries, etc. Washington: Superintendent of Documents, 1904.

—— Report on Stability of International Exchange, etc. Washington: Superintendent of Documents, 1903.

Deputy Master and Comptroller of the Mint. Annual Reports. London: British Blue Book.

Director of the Mint. Annual Reports. Washington: Superintendent of Documents.

Economist, The London. Weekly. *Passim.*

Fraser & Company. Singapore Rates of Exchange. Published at Intervals for Outgoing Home Mails. Bound Annually. Singapore: Fraser & Company, Brokers.

Huttenbach, August. The Silver Standard and the Straits Currency Question. Singapore: Fraser & Neave, Ltd., 1903.

Kemmerer, E. W. A Gold Standard for the Straits Settlements, I and II. Political Science Quarterly, XIX, 1904, pp. 639–649; and XXI, 1906, pp. 663–698.

——. Second Annual Report of the Chief of the Division of the Currency for the Philippine Islands. Manila: Government Printing Office, 1906.

——. The Recent Rise in the Price of Silver and Some of its Monetary Consequences. Quarterly Journal of Economics, XXVI, 1912, pp. 254–261.

Singapore Chamber of Commerce. Letter (with Appendices) to Government, Dated December 1902. The Currency. Singapore: Fraser & Neave, Ltd., 1902.

——. Annual Reports, 1903–06. Singapore: Fraser & Neave, Ltd.

Singapore Free Press. Daily and Weekly Editions. *Passim.*

Statistical Abstract for the Several British Colonies and Protectorates. Annual. London: British Blue Book.

Statistical Tables Relating to British Colonies, Possessions and Protectorates. Annual. London: British Blue Book.

Straits Settlements. Annual Reports; also Annual Reports of the Federated Malay States. London: British Blue Books.

Straits Settlements Currency Committee. Report, Minutes of Evidence and Appendices, 1903. London: British Blue Book.

Straits Settlements. Financial Reports and Statements. Annual. Singapore: Government.

Times, The London, Financial and Commercial Supplement. *Passim.*

See also Bibliographical References on Indian Currency Reform, pp. 149–52.

PART V

THE MEXICAN CURRENCY REFORM, 1903–08

CHAPTER I

Introduction

Mexico's chief title to fame in the economic world in modern times has consisted in its silver production and its silver dollar. Until very recently Mexico has been the world's greatest producer of silver; while for the period under study, 1903–08, it was a very close second to the United States. Prior to the opening of silver mines in the United States about a half century ago nearly all the silver used in the civilized world had for generations come from Mexico and Spanish America. From these regions it is estimated that there came more than four fifths of the world's production for the period 1493–1850; while from the latter date to 1902 a careful estimate assigns to Mexico alone 107 million kilograms out of a total world production of 284 million.[1]

Only an insignificant part of Mexico's silver production has been retained at home — in recent years approximately 5 per cent[2] — the rest being scattered over the entire world, civilized and semi-civilized. Regardless of its subsequent history, this silver, originally at least, went out in the form of Mexico's world-famed coin, the Spanish "piece of eight"[3] and its successor, under Mexican independence, the Mexican

[1] This is the estimate of A. Piatt Andrew, based upon the data collected by Soetbeer, Lexis, and the directors of the mint in France and the United States. Andrew, The End of the Mexican Dollar, in Quarterly Journal of Economics, XVIII, 1904, pp. 324–25.

[2] Cf. Werner Hegemann, Mexicos Übergang zur Goldwährung, p. 21; also Jaime Gurza, Apuntos sobre la Cuestion de la Plata en Mexico, in Comision Monetaria, Mexico, Datos para el Estudio de la Cuestion Monetaria, pp. 57–63.

[3] Since 1893–94 the exportation of uncoined silver has exceeded that of coined silver. For table of annual percentages see Gurza, op. cit., p. 60.

dollar or peso,[1] a coin which still retains practically the legal weight and fineness [2] assigned in 1772 to the earlier Spanish dollar.[3] This coin is probably the most famous one in modern history, the only one which at all challenges it being the Maria Theresa dollar. Spanish milled dollars, as is well known, were by far the most important coins in the British colonies in America before the Revolution — the coins, according to Thomas Jefferson, "most familiar of all to the minds of the people." [4]

These coins circulated also in Florida, Cuba, San Domingo, Porto Rico, and the other Spanish Antilles. Even before 1600, it is said, they circulated in the Philippine Islands, and had become familiar at such Chinese ports as Canton, Ningpo, and Amoy. Students of American monetary history know that the United States silver dollar in the Mint Act of 1792 was modeled after the Spanish milled dollar, and that the average silver content of that

[1] Throughout this paper the word peso will usually be employed for the Mexican coin in preference to dollar and will be designated by the symbol "P", in order to distinguish it from the United States dollar, which is frequently mentioned and for which the usual symbol is used. Centavo will be used to refer to the hundredth part of the peso, while cent will be used for the hundredth part of the dollar. For the sake of clearness the above terms and symbols will be substituted in quotations, except where the context clearly makes such substitution unnecessary.

[2] The Mexican peso of the period under study contained a legal gross weight of 27.073 grams (417.8 grains), and a legal millesimal fineness of .90278, giving it a fine silver content of 376.96 grains, *i.e.*, 78.53 per cent of an ounce Troy or 101.8 per cent of the fine silver content of a United States silver dollar.

[3] Despite the frequent debasement of the coins of other nations, the Spanish-Mexican peso has been subject to few important changes during its history. No coin of long history better deserves the name "an honest dollar." According to William Graham Sumner, from 1497 to our own time this peso as a world coin was only reduced by about 5.9 per cent in its pure silver content. Sumner, The Spanish Dollar and the Colonial Shilling, in American Historical Review, III, 1898, p. 617. Cf. also Robert Chalmers, Colonial Currency, pp. 392–93.

[4] Cf. Jefferson, Notes on the Establishment of a Money Unit and of a Coinage for the United States, in Report of the International Monetary Conference Held in Paris, 1878, pp. 437–43.

Spanish coin as estimated by Alexander Hamilton in his Report on the Mint was one of the important factors— probably the most important one — determining the size of the unit of value we have had ever since. The Mexican peso or its predecessor was the best known silver coin in the United States during the greater part of the first half of the nineteenth century, and did not cease permanently to be unlimited legal tender in the United States until 1857. During the greater part of the last century this coin had an extended circulation in the West Indies and South America, and until recently has been the coin of commerce *par excellence* in the Orient.[1] It still has a large circulation in China. In very recent times it has served as a model, so far as weight and fine silver content are concerned, for the ill-fated Hongkong dollar, the Japanese yen, the British dollar, the Philippine peso of 1903, the French *piastre de commerce*, and the Straits Settlements dollar of 1903.

Detailed consideration of this interesting history, however, is beyond the scope of the present study. The above facts will be sufficient to furnish the necessary background and to enable the reader better to understand some of the features of the recent reform, such as the strong popular prejudice in Mexico in favor of the old peso, the reluctance to discontinue its coinage or change its design, and the alleged difficulty of prohibiting the reimportation of these pesos and controlling their supply in Mexico in case they should be given a monopoly value in the home circulation.

This preliminary part of our discussion may be fitly concluded by an extract from an address by Mexico's able finance minister, José Yves Limantour:

"Our country finds itself in an exceptional position, in part, because from its mines are extracted one third of the

[1] Cf. J. D. Casasús, El Peso Mexicano y sus Rivales en los Mercados del Extremo Oriente. Published in Com. Mon. Mex., Datos, etc., pp. 1–18.

world's total production of silver; in part, because this industry, second only to agriculture, is the most important national industry; and in part, because silver, in addition to the rôle which as merchandise it plays in our foreign commerce, serves as our domestic monetary standard and as the measure of all other values; and finally, because that element of our wealth represents two fifths of our exports, and is therefore the prime factor in the payment of the articles which we purchase abroad and in the settlement of our trade balance."[1]

[1] Cf. Comision Monetaria, Mexico, Actas de las Juntas Generales y Documentos a ellas Anexos, p. 10. Hereafter cited as Com. Mon. Mex., Actas, etc.

CHAPTER II

Economic Conditions in Mexico Immediately Preceding the Reform of 1903–08

Prior to the reform of 1903–08 the currency system of Mexico was based upon the law of November 27, 1867, which had introduced the decimal monetary system. The preamble of this law stated its object to be the establishment of a uniform system of currency without making any essential modifications in the value of the monetary unit.[1] The law continued the Mexican peso at its previous weight and fineness as the unit of value.[2] The peso,

[1] Cf. United States Special Consular Reports, XIII, Money and Prices in Foreign Countries, in House Docs., 54th Cong., 2d Sess., 1896–97, XXXII, pp. 111–12.

[2] There were certain government charges in connection with the bringing of silver to the mints and having it coined, some of which explained in part the small divergences which nearly always existed between the money value of the peso and the value of its fine silver content. These charges were summarized as follows by United States Minister Ransom in his report of September 26, 1896:

"First. A tax of 2 per cent (erroneously called the coinage tax).

Second. Three per cent internal-revenue tax.

Third. Assay charge of P 2.50 for bullion weighing not more than 32 kilograms, and P 5 for ore.

Fourth. For smelting, when necessary, 10 cents per kilogram.

Fifth. Refining, when necessary, P 1.50 per kilogram.

Sixth. Separating, when necessary, P 1.25 per kilogram.

"The first, second, and third charges are collected on all bullion brought for coinage as well as on all metals for exportation, whether in bullion or ore. The fourth is collected on bullion for exportation and coinage when smelting is necessary. The fifth and sixth are collected on metals brought for coinage when refining and separating are necessary." Ibid., p. 112.

A good historical account of the various government charges imposed on production, coinage, sale, and exportation of the precious metals will be found in Prosper Gloner, Les Finances des États-Unis Mexicains, pp. 265–310.

together with the silver subsidiary coins of proportionate weights and the same fineness, continued to be unlimited legal tender. Contrary to the common belief, Mexico had been for over two centuries prior to 1904 (*i.e.*, since 1675) legally a bimetallic country,[1] in which there was free and unlimited, although not gratuitous, coinage of both gold and silver. This situation was continued by the law of 1867, which provided for the free coinage of gold coins of denominations varying from 1 to 20 pesos and weighing 26.1115 grains .875 fine to the peso, thereby containing 22.848 grains of fine gold,[2] and giving a mint ratio of approximately $16\frac{1}{2}$ to 1.[3] All gold coins as well as all silver coins were unlimited legal tender. This ratio appeared to be very favorable to gold for some time prior to 1875. As a matter of fact, however, it was usually unfavorable, when coinage fees, taxes, transportation charges, and other expenses were all taken into account, and the amount of gold coin in actual circulation appears always to have been small. Nearly every year from 1873 to 1905 witnessed the coinage of some gold at the Mexican mints,[4] but this coin does not appear to have gone into general circulation. Therefore, whatever the Mexican currency system was in law, it was *de facto* a silver standard system.

Monetary statistics of Mexico until recent years have been very unsatisfactory, and even at the beginning of the present century there were no reliable figures as to the amount of money in circulation. A "monetary census" officially made in 1903,[5] on the basis largely of 48,000 letters of inquiry, to which replies were received from only 12,000, accounted for about 61.7 million pesos of coin in Mexico; of which in round numbers P483,000 were gold,

[1] Hegemann, p. 2.

[2] Ann. Rep. Dir. Mint, 1901, p. 406.

[3] Cf. Special Consular Report, 1896–97, op. cit. p. 112; and Hegemann, p. 6.

[4] Ann. Rep. Dir. Mint, 1902, p. 217; and passim, 1903–06.

[5] Comision Monetario, Mexico, Datos Complementarios, etc., pp. 39–45.

P 58,145,000 were silver pesos, P 2,972,000 were fractional silver coins, and P 62,000 were copper. Adding to this the estimated amount concerning which no replies were received, the investigators arrived at a minimum of P 100,000,000 and a maximum of P 120,000,000 as their final conclusion.[1] The above estimate, however, merely covered metallic money and did not include bank notes. At the end of December 1902 the bank note circulation of Mexico was in round numbers 86 million pesos.[2] Adding this bank note circulation to the mean estimate for metallic money, we arrive at P 196,000,000, or say P 200,000,000, as the total amount of money in circulation in 1903.[3]

After having been upon a *de facto* silver standard for so many years, and having prospered for the better part of a generation as the country had never prospered before, why did Mexico give up the silver standard for a gold standard? The chief reasons for this action may be considered under the rubrics: government finance, foreign trade, and the investment in Mexico of foreign capital.[4]

Government Finances

While the pressure on government revenues resulting from the declining gold value of silver was nothing like so great in Mexico in 1903 as it was in India a decade before, and while Mexican finances were in a better condi-

[1] The estimate divided this sum as follows: public offices P 4,000,000, credit institutions P 51,000,000, mercantile establishments P 35,000,000, farms and factories P 10,000,000, and individuals P 20,000,000. Ibid., pp. 42 and 45.

[2] Comision Monetaria, Estadistica Bancaria, pp. 577 and 524.

[3] The legal reserve requirement of banks of issue against notes was 50 per cent. Cf. J. Favre, Les Banques au Mexique, pp. 40–41. Cf. also infra, pp. 526–28.

[4] In taking up these topics at this point, it should be noted that the data concerning them were incomplete and unorganized when the Mexican Monetary Commission was appointed in February 1903. A considerable part of the data here used was collected by the Commission. Cf. infra, p. 497.

tion on the whole in 1903 than were those of India in 1893; nevertheless the financial burden imposed upon the Mexican Government by the declining price of silver was a very real one.

The chief item in this burden was the interest on the gold debt. In 1899 negotiations were completed with certain European and American banking houses for the conversion of Mexico's entire foreign debt into

"a five per cent consolidated external gold loan due within forty-five years at par by semi-annual drawings, which may be increased after the year 1909, . . . or retired by purchase in the market if same can be made under par. Principal and interest of the bonds [are to be] payable in gold. . . . Bonds are secured by a special hypothecation of 62 per cent of the import and export duties of the Republic of Mexico." [1]

The total public debt of Mexico on June 30, 1902 was P 432,516,595, and of this sum P 238,960,000 represented the foreign debt (consolidated 5 per cent) payable in gold.[2] Much of the latter was incurred for public works, notably railroads and other productive enterprises.[3] Expressed in United States money the gold debt of Mexico was approximately $109,000,000, and the annual interest charge was approximately $5,450,000. The larger part of this debt had its origin at times when a Mexican peso was worth in

[1] A detailed historical account of Mexico's public debt down to 1894 will be found in Gloner, op. cit., pp. 51–154. For later figures by years, see El Economista Mexicano, published weekly in the City of Mexico, passim. For an itemized statement of the debt, see Com. Mon. Mex., Actas, etc. 1904, pp. 153–54. An analysis of the debt, as it stood in 1902–03, will be found in English in, International Bureau of the American Republics, Mexico, Geographical Sketch, Natural Resources, Laws, Economic Conditions, Actual Development, Prospects of Future Growth, 1904, in House Docs., 58th Cong., 3d Sess., LXVI, No. 145, Part 5, pp. 303–04; hereafter cited as Int. Bur. Am. Reps., Mexico. It is from the last reference that the above quotation is made.

[2] The gold debt was computed at the rate of $22\frac{1}{2}d.$ (45.6 U. S. cents) to the peso, the rate adopted in the budget of 1903–04.

[3] Cf. Com. Mon. Mex., Actas, etc. pp. 153–54.

gold much more than it was in 1902; in fact most of the gold debt dated back to a time when the peso was worth in the neighborhood of a United States gold dollar. The fact, therefore, that this gold debt amounted to P 238,960,000 instead of approximately half that sum was due chiefly to the appreciation of gold from about the year 1873 to the early nineties. A similar situation existed with reference to the interest charges, because the interest rate in gold did not decline proportionately to the rise in the silver price of gold. There was no great change in the principal of the public debt between 1896 and 1903. If we assume it to have stood at $109,000,000 during this period,[1] it would have required the following sums in pesos to have paid the interest at the average gold value of the Mexican peso as measured by New York exchange:[2]

Year	Average Gold Value of Peso (U. S. Cents)	Amount Required to Pay $5,450,000 Pesos
1896	52.4	10,410,000
1897	46.8	11,650,000
1898	46.1	11,820,000
1899	48.2	11,300,000
1900	48.5	11,240,000
1901	47.3	11,520,000
1902	41.9	13,010,000
1903	42.2	12,910,000

There were two obvious disadvantages in this situation. One was the impossibility of the Government's framing a

[1] It actually varied between about $109 and $114 million. Int. Bur. Am. Reps., Mexico, pp. 302–05.

[2] Figures for 1896 to 1902 inclusive were computed from figures for New York exchange quoted in terms of pesos to the $100. Com. Mon. Mex., Datos Estadísticos, etc., table No. 37. For 1903 the rate was computed from figures compiled for the author by the National Bank of Mexico. Cf. infra, p. 549.

well-balanced budget because of the uncertainties of exchange. An unexpected fall in the gold value of silver would greatly reduce an anticipated surplus, or even transform it into a deficit; while an unexpected rise would have the opposite effect. The second disadvantage arose from the fact that one of the chief sources of Mexican federal revenue was customs duties on imports. These duties were collected in silver or on a silver basis, and silver had been declining rapidly in its gold price, the decline having been particularly pronounced since the fore part of 1901 (see chart on page 535). Such a decline in the price of Mexico's chief article of export, with consequent rise in the gold exchanges, therefore cut into the customs receipts in two ways: first, by tending to cause a decline in the amount of goods imported and, second, by reducing the gold value of the duties paid on such goods as continued to be imported.[1]

These difficulties were partly met by the device of a sliding scale of customs duties,[2] a device which increased the rate of duties as exchange rose, but *ipso facto* tended still further to lessen importations. In proposing this measure Secretary Limantour explained its purpose, saying that important government services should not be compelled to suffer because of fluctuations in the gold price of silver, and

"considering that the bulk of the revenue from import duties is assigned to the service of the foreign debt, the obvious course seems to be to establish by means of carefully

[1] President Diaz said on September 9, 1896: "There is another point of view. The foreign debt of the country is payable in gold. The duties on imported merchandise are collected in silver, or on that basis. The high rates of exchange, together with the decrease in our customs collections . . . have caused a considerable shrinkage in this source of revenue." Quoted by Matías Romero, Mexico and the United States, p. 567.

[2] Cf. Diario Official, Nov. 24, 25, and Dec. 1, 1902. The law went into operation Jan. 1, 1903. See also U. S. Consular Reports, LXXI, 1903, pp. 176–78.

prepared enactments a close relationship between that branch of revenue and the rate of exchange, in such manner that the burden of taxation will increase or diminish in proportion to the amounts necessary to meet our indebtedness in gold."[1]

Foreign Trade

As in the case of the other countries studied, fluctuations in exchange caused serious disturbances in Mexico's foreign trade. By far the greater part of this trade was with gold-standard countries, and the ups and downs of the price of silver were very important factors in determining the profits realized.

Figures are not available for the high and low exchange rates in Mexico on any gold-standard country for the ten years preceding the currency reform, but inasmuch as there was free coinage of silver and as Mexican exchange therefore normally followed fairly closely the fluctuations in the price of silver, one may obtain a fair idea of exchange fluctuations by referring to the fluctuations in the price of silver. These are given in the following table, also the average monthly exchange rates in Mexico on New York.

The figures of the table require little explanation. Annual ranges in the London price of silver during the ten years 1893–1902 varied from 21.3 per cent in 1893, the year of the closing of the Indian mints and of the repeal of the Sherman Silver Purchase Act, to 5.7 per cent in 1896. Even this minimum annual range, however, was sufficient to eat up the entire annual interest on an ordinary investment. For the entire period the range was 44 per cent, using the high rate ($38\frac{3}{4}$*d.*) as the base, 78.7 per cent if one uses the low rate ($21\frac{11}{16}$*d.*) as the base. Judging annual variations in Mexican exchange rates on New York by average monthly rates, *i.e.*, calling the highest average monthly rate for

[1] The [London] Economist, 1902, p. 1930.

Year	Variation in Average Monthly Exchange Rate in Mexico on New York[1]			Variation in Price of British Standard Silver in London[2]								
	High	Low	Variation	High	Low	Variation for Year	Max. Variation in any Month of Year			Min. Variation in any Month of Year		
	Pesos	*Pesos*	*Per Cent*	*Pence*	*Pence*	*Per Cent*	*Month*		*Range Per Cent*	*Month*		*Per Cent*
1893	180.00	152 00	15.6	$38\frac{3}{4}$	$30\frac{1}{2}$	21.3	June	₱	$38\frac{3}{4}-30\frac{1}{2}$	Feb.	₱	$38\frac{1}{2}-38\frac{1}{4}$
								%	21.3		%	o 6
1894	204.00	193.25	5.8	$31\frac{3}{4}$	27	15.0	Feb.	₱	$30\frac{11}{16}-27\frac{1}{2}$	July	₱	$28\frac{15}{16}-28\frac{7}{8}$
								%	10.4		%	0.2
1895	204.12	184.75	9.5	$31\frac{3}{8}$	$27\frac{3}{16}$	13.3	March	₱	$29\frac{3}{4}-27\frac{5}{8}$	Sept.	₱	$30\frac{9}{16}-30\frac{7}{16}$
								%	7.2		%	0.4
1896	199.00	184.25	7.9	$31\frac{9}{16}$	$29\frac{3}{4}$	5.7	Aug.	₱	$31\frac{3}{8}-30\frac{3}{8}$	July	₱	$31\frac{1}{2}-31\frac{3}{8}$
								%	3 2		%	0.4
1897	233.37	196.75	15.7	$29\frac{13}{16}$	$23\frac{3}{4}$	20.3	Sept.	₱	$27\frac{1}{4}-23\frac{3}{4}$	Feb.	₱	$29\frac{3}{4}-29\frac{11}{16}$
								%	12.8		%	0.2
1898	220.87	212.25	3.9	$28\frac{5}{16}$	25	11.7	March	₱	$26\frac{1}{16}-25$	Dec.	₱	$27\frac{5}{8}-27\frac{1}{4}$
								%	4.1		%	1.4
1899	212.00	202.25	4.6	$28\frac{7}{8}$	$26\frac{5}{8}$	7.8	April	₱	$28\frac{7}{8}-27\frac{3}{8}$	Feb.	₱	$27\frac{1}{2}-27\frac{3}{8}$
								%	5.2		%	0.5
1900	211.00	198.62	5.9	$30\frac{3}{16}$	27	10.6	Oct.	₱	$30\frac{3}{16}-29\frac{1}{8}$	May	₱	$27\frac{5}{8}-27\frac{1}{2}$
								%	3.5		%	0.5
1901	226.45	200.00	11.5	$29\frac{9}{16}$	$24\frac{15}{16}$	15.6	Jan.	₱	$29\frac{9}{16}-27\frac{3}{4}$	Sept.	₱	$27-26\frac{7}{8}$
								%	6.1		%	0.5
1902	261.41	219.90	15 9	$26\frac{1}{8}$	$21\frac{11}{16}$	16.6	Nov.	₱	$23\frac{1}{4}-21\frac{11}{16}$	Feb.	₱	$25\frac{1}{2}-25\frac{5}{16}$
								%	6.7		%	0.7
Period 1893–1892	261.41	152 00	41.8	$38\frac{3}{4}$	$21\frac{11}{16}$	44.0	June 1893	₱	$38\frac{3}{4}-30\frac{1}{2}$	Feb. 1897	₱	$29\frac{3}{4}-29\frac{11}{16}$
								%	21.3		%	0.2

[1] Com. Mon., Datos Estadisticos, Estado 37. Figures here represent the number of pesos required to buy a demand draft on New York for $100.

[2] Pixley & Abell Tables.

the year *high* and the lowest *low,* we find a similarly large annual variation. The highest range, *i.e.*, 15.9 per cent, was in 1902 (although those of 1893 and 1897 were very nearly as high); while the lowest range, *i.e.*, 3.9 per cent, was in 1898; the range for the ten-year period was 41.8 per cent, or very nearly as large as the range for the price of silver.

In some months the fluctuations in the price of silver were very large, as for example, June 1893 (21.3 per cent); September 1897 (12.8 per cent); and February 1894 (10.4 per cent); while in other months it was very small, as for example July 1894 and February 1897 (both 0.2 per cent). There were few months, however, during the entire period in which the fluctuations were not sufficient to be real items in all substantial foreign trade operations.

Influence of Rising Exchange upon the Returns Received for National Products

In connection with Mexico's foreign trade one important factor leading to the demand for currency reform was a growing conviction on the part of thinking people that the decline in the gold value of the peso, as expressed in rising exchange rates, was resulting in the exploitation of Mexico for the benefit of foreign countries; or, in other words, in a tendency to require her to give too many of her own products in her export trade for the foreign products she received in exchange in her import trade. This subject is one that received careful consideration from the Mexican Monetary Commission in 1903.[1] It was ably treated in a memorandum submitted to that Commission by the members of the American Commission on International Exchange, which was appointed by the United States Secretary of State to confer with representatives of the Mexican

[1] Cf. Com. Mon. Mex., Actas, etc., pp. 67–106.

and Chinese Governments. Upon this subject the reasoning of the American Commissioners was as follows:

"The fall in the gold price of silver permits goods to be sold abroad for a falling gold price, so long as wages and the cost of materials at home remain unchanged in terms of silver, [since the exporter receives a continually larger number of local pesos for each gold unit, *i.e.*, dollar, pound, etc., which he receives abroad for his product]. It is this influence which enables a country with a depreciating currency to underbid its rivals in selling its products in markets where gold is the standard. There are perhaps certain temporary benefits in this condition, in extending and developing the trade of the exporting country. It is an important question, however, whether the continuous depreciation of the standard may not reach a point which will soon result in the surrender of a given quantity of domestic goods to foreign purchasers in exchange for a continuously declining quantity of foreign goods."[1]

Figures for the value of Mexico's exports in terms of pesos showed a great increase from 1882 to 1902, rising from P 29.2 millions in 1882 to P 75.7 millions in 1892, and to P 168.0 millions in 1902.[2] If one measured this increase, however, in terms of gold instead of in terms of silver it did not appear anything like as large, particularly the increase since 1892. In 1882 the gold value of the exports was \$26.1 millions, in 1892 it was \$63.3 millions, and in 1902 \$74.1 millions, the respective average gold values of the silver peso for those three years having been \$0.894, \$0.837, and \$0.441. In terms of percentages the increases in the exports were as follows:

[1] The Influence of Falling Exchange upon the Returns Received for National Products. Argument submitted by Messrs. Charles A. Conant, Jeremiah W. Jenks, and Edward Brush, to the Monetary Commission of the Republic of Mexico, April 18, 1903. Published in Stability of Exchange etc., by the Commission on International Exchange of the Republic of Mexico, 45–46. Hereafter cited as Infl. of Fall. Exch., etc.

[2] Cf. Infl. of Fall. Exch., etc., p. 46; also Com. Mon. Mex., Datos Estadisticos, etc., table No. 2.

Year	Silver Values	Gold Values
1882	100	100
1892	259	242
1902	575	284

Measured in gold, therefore, it will be seen that after 1892 the value of the exports increased very slowly, *i.e.*, only about a million dollars a year, or less than 17 per cent in 10 years; as compared with \$3.7 millions a year, or 142 per cent for the preceding 10 years.

The American Commissioners next took up the question whether the increase in the quantities of the goods exported had merely kept pace with the small increase in their gold value or had been greater or less.[1] Aside from the precious metals, which the Commissioners considered separately, they found six important articles of export representing 29 per cent of the total merchandise exports of 1892 and 27½ per cent of those of 1902, for which comparable figures were available. They were copper, coffee, beans, fresh fruit, ixtle, and dyewoods. For all of these items except dyewoods gold prices were lower in 1902 than in 1892. Computing the value of the 1902 exports of these articles in terms of their respective gold prices in 1892, the Commissioners found that at these prices the articles would have been worth \$16.9 millions, whereas their actual value at 1902 prices was but \$10.8 millions, a loss of 36 per cent. Assuming the same percentage loss on the other merchandise exports (exclusive of silver) the Commissioners arrived at an aggregate loss of \$22.5 millions gold.[2] The exports of silver for 1902 computed at the gold prices of 1892 would have been \$22.7 millions gold more valuable than they actually were. Adding these two items together we arrive

[1] Infl. of Fall. Exch., etc., p. 47.
[2] Ibid., p. 49.

at $45.2 millions, say $45 millions,[1] as the total loss suffered by Mexico in the gold value of her exports in 1902 when comparison is made with 1892. This loss, moreover, was not merely for a single year. Such losses had been occurring ever since the fall in the gold value of silver began, and their amounts had been growing rapidly since 1892.

This, however, as the reader has doubtless already observed, is only one side of the story. Mexico's exports were paid for ultimately not in gold but in merchandise imports. Part of the period 1892 to 1902, *i.e.*, 1892 to 1896, was a period in which gold prices the world over were rapidly falling, or, in other words, a period in which the value of gold was rapidly rising. A decline in the gold prices of Mexico's exports would have been a matter of small concern, if the gold prices of the foreign goods she imported had fallen as much or more. The important question was not how much gold, but how much merchandise, Mexico was receiving for a given quantity of the products she was exporting. This side of the question the Commissioners found more difficult to answer, because the articles imported were of much greater variety than the articles exported, and were divided more minutely into classes by the tariff classification. In many cases, moreover, the imports were of such a character that it was impossible to classify them in physical quantities, and they were entered in custom house money returns only by their money values.[2] Selecting ten groups of articles for which comparable figures were available for approximately the two dates, *i.e.*, for the years 1893 and 1902, articles representing 18.66 per cent of the gold import values of 1893, the Commissioners found that these goods were worth $15.0 millions in 1902, and at 1893 prices they would have

[1] In one place the Commissioners give the figure as $50 millions (p. 50), and in another as $40 millions (p. 51). The computations are at best very rough approximations as the trade figures themselves are far from reliable.

[2] Ibid., p. 50.

been worth $18.5 millions, representing a decline of 18.7 per cent,[1] as compared with a decline of 36 per cent for the articles exported. Extending this ratio of 18.7 per cent to the total imports for 1902, they found a total decline in gold values of $14.1 millions. Setting this gain in import values against the estimated loss of $45 millions on export values, we arrive at $30.9 millions as the net loss. The Commissioners' figures gave a net loss of $26 millions, but this they considered as probably too small, after a study of the prices of certain specified commodities exported to Mexico from the United States.[2] After making numerous qualifications, and pointing to the fact that many forces besides monetary forces were at work, the Commissioners concluded that Mexico had in recent years been expending a growing proportion of her own labor and intellectual efficiency in return for a given amount of foreign products; and that if this were due even in part to the monetary system, as the Commissioners believed it was, it was an evil of the most serious character,[3] since it involved a progressive impoverishment of the economic resources of the country and the needless enrichment of those with whom Mexico traded.[4]

[1] Ibid., p. 51.

[2] Ibid., pp. 51–52.

[3] Ibid., p. 55.

[4] Only a few years before 1892 Mexico appears to have profited decidedly by the movements of the gold price of silver, if we can accept the figures of Franciso Bulnes. His computations showed that in 1875 the cost of Mexico's merchandise imports was $18.9 millions; and that for the same commodities in 1885 the cost would have been but $12.7 millions in consequence of the great fall in gold prices. This was a decline of approximately 34 per cent. Similar figures were computed for the value of Mexico's merchandise exports in 1875 at the prices of 1885, and the result showed a decline of only 6.8 per cent, and, if silver exports were also included, a decline of 14 per cent. But if Mexico's imports had declined on the average 34 per cent in their gold prices, and her exports had declined in their gold prices only 14 per cent, Bulnes thought, the country had little reason to complain of the price situation. Francisco Bulnes, Cris. Mon., p. 131 ff., quoted by Hegemann, op. cit., pp. 58–59.

Investment of Foreign Capital

The subject of the investment of foreign capital in Mexico played a very important rôle in the discussion leading to the monetary reform. Mexico was a comparatively undeveloped country, rich in natural resources but with little home capital with which to exploit them. For generations foreign capital had been flowing into the country; but while profits were often large, so also were risks, and the number of Mexican ventures involving large investments of foreign capital that had "gone on the rocks" was great. Since the recovery from the panic and depression of 1893–94, when Mexico suffered severely from the sudden drop in silver resulting from the closing of the Indian mints and the repeal of the Sherman Silver Purchase Act, the finances of the country had been rapidly improving, thanks largely to the enlightened policies of Finance Minister Limantour. During the period 1894–1903 foreign investments in Mexico had been growing rapidly, particularly from England, the United States, France, and Germany.[1] How much they amounted to in 1903 no one knew, as no comprehensive stattistics had been collected. The task of computing such statistics was in 1903 assigned to a subcommission of the Mexican Monetary Commission, and from its report we can form an imperfect idea of the extent of these invest-

[1] "The great drygoods houses and cotton mills are French, as is also much of the older capital invested in banking. The Spaniard, frugal and thrifty, handles the cattle and grain trade and sells groceries. Hardware and jewelry are the chosen field of the German. The newer banks and the dealing in machinery constitute a part of the American's activities. His money, with that of the English, has also taken up the heavy investments of mines, railroads and light, traction and power plants, although there is other European capital as well employed in investments of this nature. The opening up and breaking in of the hot country or tropical lowlands, from the developed fertility of which great results are anticipated, owes its recent advancement to the pioneering of the American." Morrill W. Gaines, Effects of the Silver Standard in Mexico, in Yale Review, XII, 1903, p. 278.

On the subject of the history of foreign investments in Mexico from 1810 to 1904 see Hegemann, op. cit., chap. 4.

ments. It should be noted that this subcommission experienced great difficulty in securing data on the subject, and that its figures are far from complete. They represent an "extreme minimum." Briefly, and in round numbers, they may be summarized as follows:[1]

	000,000
(1) Foreign capital invested in banking, mining, agriculture, mercantile and industrial enterprises	₱136.1
(2) Insurance companies of various kinds. Estimated by capitalizing at 5 per cent the estimated net profits.	16.9
(3) Railroads, deducting government subventions of ₱87.4 millions to foreign owned property	767.2
(4) Public debt[2]	432.5
Total	1,352.7

Converting this to United States currency at the official rate of $22\frac{1}{2}d.$ to the peso, and counting $4.8665 to the pound sterling, we arrive at a total foreign investment in Mexico of $617 millions.

In like manner the subcommission estimated the annual net payments due to foreigners for interest, rents, and profits, at P 49.2 millions, which would be equal to $22.4 millions.[3]

These investments fall into two broad classes from the standpoint of the currency problem: (1) direct investments made for the account of foreign capitalists; and (2) indirect investments made for the account of Mexican proprietors in the form of loans to these proprietors.

The first class was represented chiefly by the ownership of stocks in Mexican corporations, and by the individual or partnership ownership of Mexican properties of every

[1] Com. Mon. Mex., Actas, etc., pp. 148–55.

[2] Out of a total public debt of P 432.5 millions all but P 15.0 was held abroad, and most of this small sum held in Mexico was apparently owned by resident foreigners. Ibid., p. 154.

[3] The conservative character of these estimates will be appreciated when it is noted that United States Consul-General Barlow, in a report in 1902, stated that the amount of United States capital invested in Mexico by 1,117 United States companies, farms, and individuals was in round numbers $500 millions. Internat. Bur. Am. Reps., Mexico, op. cit., p. 257.

kind. Profits in these enterprises were not only realized but paid in local pesos; and upon the shoulders of the foreign investor were placed the risks incident to a fluctuating exchange. When the gold value of the peso rose, *i.e.*, when exchange fell, the foreign investor received more dollars, pounds, or francs for each P 100 of profits; when the gold value of the peso fell he received less. Upon this point the subcommission concluded after a careful study of the facts: [1]

"Since the rise in the exchanges, although gradual, has been none the less continuous, the capitalists who have invested their capital in Mexico are not able to withdraw it from the country because to convert it into gold would result in a considerable loss; nor is it agreeable to leave it invested, because every day its gold value declines further. . . . Although these properties, such as stocks of banks and of industrial concerns, have risen in price in terms of pesos, and the dividends received have been growing, these increases have not been sufficient to compensate for the loss in the principal and interest, due to the declining gold value of the peso.[2]

The second class of investments, *i.e.*, "the indirect investments," was represented chiefly by loans made in gold

[1] Com. Mon. Mex., Actas, etc., p. 89.

[2] An illustration is found in the profits of the Mexican Central Railroad. These profits per mile expressed in pesos and in United States dollars for the period 1891–97 were as follows:

YEAR	PESOS	DOLLARS
1891	4169	3236
1892	4146	2896
1893	4322	2701
1894	4530	2351
1895	5069	2683
1896	5352	2837
1897	6552	3129

Com. Mon. Mex., Datos, etc., p. 68.

and repayable principal and interest in gold. Its most important forms were the gold bonds of the Government and of the railroad companies. Here the chief burden of a declining gold price of silver fell directly upon the shoulders of the Mexican people, since the obligations for principal and interest in terms of gold remained unchanged whether the peso was worth 50 cents or 40 cents. But in the latter case it would have required P 125 to meet the annual interest upon a $1000 five per cent gold bond, whereas in the former it would have required but P 100. To pay off the principal at the former rate would have required P 2000 and at the latter P 2500. Inasmuch as the revenues from which the interest and principals of such gold debts were paid — revenues from taxes in the case of the government debt, revenues from railway freight and passenger services in the case of the railway debts, and from the sale of commodities and services in the case of the other business debts — could not be increased in proportion as the gold value of the peso fell, debtors found it increasingly difficult to meet their obligations punctually, while creditors suffered from the resulting impairment of their debtors' credit and financial ability.[1]

This situation was making it increasingly difficult to induce foreign capitalists to invest in Mexico, and, as we have seen, it was largely upon foreign capital that Mexico depended for the opening up and development of her great resources.

Three evils, then, with their harmful effects upon different classes in the community, were the chief reasons advanced by those favoring the fixing of Mexican exchange at a definite par with gold. Summarizing, they were: (1) the uncertainties and the losses which an unstable exchange

[1] From January 1901 to November 1902 the London price of silver fell from $29\frac{9}{16}d.$ to $21\frac{11}{16}d.$ "This sudden fall in the price of silver shook the foundations of all enterprises in Mexico, which were compelled to meet interest obligations on their foundation capital in gold. Those in the worst situation were the Mexican railroads." Hegemann, p. 120.

brought to the government budget; (2) the inhibitions upon the import trade, and consequent rise in prices of imported goods, along with the overstimulation of the export trade resulting in the undue exploitation of Mexican resources for the benefit of foreigners; and (3) the interference with foreign investments in Mexico and the increasing difficulty on the part of Mexicans of meeting the obligations in gold already incurred.

Other evils might be mentioned, such as the speculative element an unstable exchange brought into business transactions, the disturbing influences it had upon local prices, and the tendency a declining gold value of the peso had to oppress the laboring classes through the fact that their wages tended to lag behind prices in the resulting upward movement.[1]

Alleged Advantages of the Silver Standard

It must not be supposed that intelligent opinion in Mexico was anything like unanimous in favor of a gold standard. Such was far from being the case,[2] although the great fall in silver of 1901 and 1902 appears greatly to have increased the sentiment in that direction. That Mexico had made remarkable progress under the silver standard there could be no question.[3] How far that progress could be

[1] The Mexican Commission on International Exchange in the memorandum handed in June 3, 1903 (pp. 3–4) cited seven ways in which the low value of the peso and the violent fluctuations in exchange had injured Mexico. They all, however, are comprehended in the reasons given above.

[2] As late as 1898 Matias Romero, Minister of Mexico to the United States, wrote: "Everybody in Mexico, that is, from the educated to the ignorant, from the rich to the poor, from the natives to the foreigners, and even the bankers who in other countries are decidedly favorable to the gold standard, are all in favor of silver. The Government holds the same opinion. As Mexico is now prosperous a large portion of the people attribute its prosperity to the silver standard and are therefore decidedly favorable to the continuance of that standard." Mexico and the United States, pp. 576–77.

[3] "A reason put forth, as being decisive against plans of monetary reform, is that the country has never been so prosperous and so well off as when the

attributed to the silver standard, how far it was in spite of the silver standard, and how far the matter of the monetary standard was an affair of practical indifference, it was impossible to say. Whether or not that standard would have been permanently and broadly beneficial, there seemed to be little question but that temporarily at least it was benefiting certain interests, and these interests were naturally favorable to its continuance. The limits of this book will permit no more than a brief summary of these supposed advantages:

Advantage to the Silver Industry. In the fore front stands the advantage to the silver industry itself — aside from agriculture, the chief industry of Mexico. Although the relative importance of exports of silver had been declining for seven years, the industry still was providing approximately half of the total exports.[1] To this industry the advantages of the silver standard were mainly two: (*a*) it provided through the system of free coinage an unlimited home market for silver at a fixed price; (*b*) it tended to keep wages constant in terms of silver (reducing them in terms of gold) although the gold value of silver was depreciating.[2] The advocates of a gold standard generally seemed to take it for granted that, should a gold standard be adopted, it would be necessary for the Government to make some compensatory concessions to the silver industry.

depreciation of the white metal was most pronounced. . . . Though it may seem paradoxical (thus to this day argue some of the advocates of the *status quo*) the fact is that the period of the country's greatest prosperity has been precisely that during which the price of silver was lowest." Finance Minister Limantour, Com. Int. Exch., Rep. 1904, p. 425.

Cf. also British Diplomatic and Consular Reports, Mexico, 1904.

[1] In 1885 silver constituted 70 per cent of the total exports; in 1890, 61 per cent; in 1895, 56 per cent; and in 1901, 46 per cent. Com. Mon. Mex., Datos Estadísticos, etc., Table No. 4.

[2] The chief disadvantage of the silver standard to the silver industry was the fact that many of its supplies, such as machinery and quicksilver, had to be imported from gold standard countries at an ever increasing silver expense.

Stimulus to the Export Trade.[1] A second line of argument of which much was made was the familiar one, that a depreciating unit of value stimulated the export trade by giving to the home producer an ever increasing number of pesos for each unit of gold paid him for his products exported abroad.

The total annual exports, exclusive of silver, measured both in pesos and United States dollars, and the average annual gold value of the peso in terms of United States currency, for the period 1884–85 to 1901–02, in round numbers were as follows:[2]

Year	Exports (Pesos)	Exports (Dollars)	Value of Peso (U.S. Cents)
	000,000	000,000	
1884–85	13.9	12.0	86.4
1885–86	14.8	12.1	81.6
1886–87	16.3	12.9	79.0
1887–88	18.7	14.2	75.9
1888–89	22.2	16.4	73.9
1889–90	24.6	18.6	75.8
1890–91	27.9	23.4	83.7
1891–92	27.5	23.0	83.7
1892–93	32.6	21.4	65.7
1893–94	34.5	18.6	53.9
1894–95	46.9	24.1	51.4
1895–96	51.0	27.3	53.6
1896–97	58.2	29.4	50.6
1897–98	70.4	31.5	44.8
1898–99	81.2	38.3	47.2
1899–1900	94.7	45.1	47.6
1900–01	85.6	41.8	48.8
1901–02	108.5	47.9	44.1

[1] Cf. report of the Fourth Subcommission of the Mexican Monetary Commission discussed later (pages 500–502) on the question: "Has the rise in foreign exchange rates protected and stimulated national production, and, if so, has this protection extended itself to producers and consumers alike?" Com. Mon. Mex., Actas, etc., pp. 68–88.

See also Jaime Gurza, Influencia de la Depreciacion de la Plata sobre le

[2] Based upon figures computed by the Mexican Monetary Commission, Com. Mon. Mex., Datos Estadísticos, etc., Tables Nos. 1 and 4.

An examination of the table will show that exports measured in pesos moved in the opposite direction from the movement of the gold value of the peso, when that gold value was falling. Of the 17 years for which the table makes comparisons possible, the gold value of the peso fell in 10 years, and in each of these years there was a substantial increase in the peso value of the exports. In six of the other seven years the gold value of the peso rose — in one it was unchanged — but in five of these six the peso value of the exports also rose. The writer has calculated for these figures, according to the method of Karl Pearson, the coefficient of correlation. In conformity with the theory that a decline in the gold value of a silver or a fiduciary monetary unit stimulates exports to gold standard countries, the coefficient is the remarkably high inverse one of $-.867 \pm$ a probable error of .0392.

One obvious objection to this comparison is the fact that the exports are computed in terms of value instead of in terms of units of quantity, for which adequate data are not available, and that a decline in the gold value of the peso would of itself naturally be expected to find expression in higher prices, and hence, in larger export values as measured in pesos. This objection is within limits a valid one, but it is weakened by two qualifications: (1) the well-established fact that down to the year 1892 the decline in the gold price of silver was chiefly an expression of a rise in the value of gold rather than of a decline in that of silver;[1] and

Progreso de Mexico. Com. Mon. Mex., Datos para el Estudio de la Cuestion Monetaria en Mexico, etc., pp. 63–9; E. Nasse, Das Sinken der Warenpreise während der letzten 15 Jahren, in Jahrb. f. Nationaloek. u. Statistik, Neue Folge, Bd. 17, 1888, pp. 50 and 129; and Eugene Viollet, Le Probléme de l'Argent et l'Etalon d'Or au Mexique, Part 1, chaps. 3–6; and Matias Romero, Mexico and the United States, pp. 596–604.

[1] Cf. table based upon Sauerbeck's index numbers and the London price of silver showing in terms of purchasing power in England the variations in the value of gold and in that of silver annually, 1870–1903. J. F. Johnson, Money and Currency, p. 251.

(2) the fact so often mentioned in these essays, that price changes in a silver or fiduciary standard country normally lag far behind changes in the gold value of the money unit.

If we measure the exports in gold values instead of silver values, we find that of the ten years in which the gold value of the peso fell eight showed an increase in exports and only one a decrease. The coefficient of correlation for the movement of the gold value of the peso and the gold value of exports is $-.776 \pm$ a probable error of .0628. This is a high inverse correlation, though considerably lower than the $-.867$ found for prices measured in pesos.

Despite these high coefficients of correlation, the writer believes that this statistical evidence is far from conclusive, and that the deductive argument affords the strongest ground for believing that a declining price of silver stimulated the Mexican export trade. The reason for this opinion may be stated in a few words. The population of Mexico was growing, and without any artificial stimulation whatever there would have been a normal tendency for exports to increase. According to the table they increased in terms of pesos in 15 of the 17 years [1] including five of the six years in which silver rose.[2] This fact coupled with the doubtful value of Mexico's trade statistics during the earlier years, and the fact that the figures are in values and not in units of quantity, make it appear wiser to rely chiefly upon *a priori* reasoning, and upon the testimony of those familiar with the particular export industries. These methods,

[1] In terms of gold they increased in 13 of the 17 years.

[2] According to the theory in its converse form a falling gold value for the peso should have inhibited imports. For the 10-year period 1892–93 to 1901–02 inclusive, for which import figures are given, while the gold value of the peso fell in five years and rose in four, the silver value of the total imports rose in eight years, including every year but one in which the gold value of the peso fell. However, in only two of the five years in which the gold value of the peso fell did the gold value of the imports rise; while in all four of the years in which the gold value of the peso rose the gold value of the total imports also rose. Cf. Com. Mon. Mex., Datos Estadísticos, etc., Table No. 13.

however, in the main substantiate the testimony of the crude statistics. The *a priori* argument that the declining value of the peso encouraged the production and exportation of agricultural articles was strong; and the export figures for certain products such as heniquen, coffee, and beans were favorable to that conclusion.[1]

On the other hand, the argument in favor of a continuance of the silver standard in Mexico because of the encouragement to the export trade resulting from the decline in the gold value of silver was weaker for Mexico than for most countries for two reasons: first, because approximately half of Mexico's exports consisted of the depreciating silver itself, whose production and exportation obviously was not stimulated by the decline; and second, because Mexico in her recent development was largely dependent upon foreign countries for her supplies of machinery, quicksilver for the silver mining industry,[2] railroad materials, and raw cotton — articles whose peso cost was greatly increased by the decline in silver.

Protection to Home Industries. The common argument that a rising exchange, though perhaps beneficial to the export trade, is, *per contra*, harmful to the import trade, since it requires an ever increasing number of pesos to buy a given amount of foreign goods at fixed gold prices, was used by the advocates of silver as an argument for the silver

[1] Cf. Romero, op. cit., pp. 596–604, and Com. Mon. Mex., Datos Estadísticos, etc., Table No. 4.

"Agricultural products have been diversely affected according to the nature of the several crops. No one can question that the production of fibre, particularly heniquen, has received a vigorous impetus and that that impetus is due largely to the rise in the rate of exchange. The same may be said of certain cereals, such as beans and chick peas, and of dried fruits, as well as of untanned skins, though extraneous causes have also influenced the upward movement. . . . Finally, coffee, tobacco, vanilla, and a number of articles which are exported on a small scale do not seem to have been benefited to a marked extent. . . ." Finance Minister Limantour, Com. Int. Exch., Rep. 1904, pp. 425–26.

[2] Cf. Hegemann, pp. 62–64.

standard. For, said they, this inhibition of imports provides an effective protection to home industries. This reasoning placed in their hands nearly all the familiar weapons of the advocates of a high protective tariff,[1] the chief of which was the infant industry argument. It was claimed that the decline in silver was encouraging the building of numerous manufacturing establishments in Mexico, including cotton and woolen mills, and alcohol, paper, and cigar factories;[2] and that it was causing American factories to establish branches in Mexico to supply the Mexican trade. The local traffic on Mexican railroads, moreover, was said to be benefiting at the expense of the through traffic from the United States.

"One of the leading directors of the Mexican Central Railroad," said Romero in 1896, "has informed me that about ten years ago the supplies imported to operate that road amounted to 60 per cent of all the material used, and that to save the loss on exchange, the Company has been following the system of manufacturing in Mexico all that they possibly can, and that the proportion of foreign supplies imported during the last year has been reduced now to 20 per cent, and that they have decided to use Mexican rails, as soon as they can be manufactured in Mexico.[3]

[1] Cf. Romero, pp. 596–600.
[2] Cf. supra, pp. 479–80.
[3] Romero, p. 598.

CHAPTER III

Commissions Investigate the Subject of Currency Reform for Mexico

Commissions on International Exchange. One of the first steps taken by Mexico in the direction of monetary reform was a move to obtain uniformity of action in certain matters on the part of silver standard countries. In this effort it secured the coöperation of China; and in January 1903 the two Governments submitted to the United States Government practically identical notes asking its coöperation in seeking a remedy for the evils arising from the existing unstable exchange relations between gold standard countries and silver standard countries. The note[1] mentioned sixteen silver standard countries whose total import trade in 1902 was $575,000,000, by far the larger part of which was with gold standard countries; it showed how the declining price of silver put up barriers, analogous to tariff barriers in their effect, against that trade, to the detriment of silver countries and gold countries alike; it referred to the interference of this decline in silver with foreign investments in Mexico; and pointed out the importance of silver and its by-products of gold, copper, and lead as mineral products in both Mexico and the United States. There was a disclaimer in the note of any intention of reviving the question of bimetallism, or of bringing about any material changes in the currencies of gold standard countries. It was merely desired "that the governments of gold countries having dependencies where silver is used

[1] Int. Exch. Com., Rep. 1903, pp. 38–47.

and the governments of silver countries shall coöperate in formulating some plan for establishing a definite relationship between their gold and silver moneys, and shall take proper measures to maintain such relationship." [1]

The request was favorably received by the United States, and the appointment of an American commission was authorized by an Act of March 3, 1903. On April 21 Secretary Hay appointed as American Commissioners Hugh H. Hanna, Charles A. Conant, and Jeremiah W. Jenks.[2] The American Commission, together with the Mexican Commission, went to Europe and consulted with Commissions appointed by the Governments of Great Britain, Holland, Germany, and Russia. A two-volume report[3] was made by the Commission which contained many data of value to the Mexican Government in working out its plan of reform, and was also of use to other countries like the Philippines, Panama, and the Straits Settlements, which were at that time about to adopt a gold standard currency. The Mexican and American Commissions favored the gold-exchange standard for countries about to give up the silver standard, and upon the soundness of the Commission's general proposition in favor of the gold-exchange standard "there was universal agreement at every European capital where the subject was presented." [4] Except for Russia, all the countries consulted favored the adoption of a relatively uniform ratio of about 32 to 1 in the currency systems to be established in the Orient by those countries and dependencies which were considering a change in their existing systems. The two Commissions did not succeed, however, in inducing

[1] Int. Exch. Com., Rep. 1903, p. 41.

[2] For letter of instructions to the American Commissioners, see ibid., pp. 46–47.

[3] Commission on International Exchange, Stability of International Exchange, etc., 1903; and Report on the Introduction of the Gold-Exchange Standard into China, the Philippine Islands, Panama, and other Silver-Using Countries, etc., 1904.

[4] Int. Exch. Com., Rep. 1903, p. 33.

China to adopt a gold standard, nor did they succeed in inducing the various countries to buy their silver with such regularity as to bring about any appreciable results in permanently steadying the price of the white metal; although as to the wisdom of such a policy they reported there was agreement in each capital at which the subject was considered except in Paris.[1]

Mexican Monetary Commission

On February 4, 1903 President Diaz, through Finance Minister Limantour, appointed a Commission of 44 persons to investigate monetary conditions in Mexico; and to report a plan of reform, if changes in the monetary system should be found to be desirable.[2]

The Commission met on February 19 and organized for work. Pablo Macedo was elected President; Enrique Creel, Vice President; Louis G. Labastida, Secretary; and Jaime Gurza, Pro-secretary. Upon authorization by the Commission, President Macedo appointed four subcommissions of ten members each "to study and report upon the four chief points of the questionnaire formulated by the Finance Minister," reserving until later the naming of a fifth subcommission, if needed, to take part in the deliberations of the other subcommissions, furnish them data, and integrate their work.[3] Each subcommission was free to organize its work as it saw fit. Any member was authorized to submit to the subcommissions or to the Commission his opinions or votes in writing, or to have them inserted in the report. The expression of individual opinion was encouraged by the Executive. Sessions were to be private, only such outsiders being permitted to attend as were invited to assist.

[1] Ibid., p. 34.
[2] Com. Mon. Mex., Actas, etc., pp. 1–4.
[3] Ibid., pp. 5–6.

The work assigned to the four subcommissions respectively may be summarized as follows:

First Subcommission. This subcommission was charged with the collection of detailed and reliable data concerning the importation of foreign commodities; the exportation of Mexican commodities; the amount of foreign capital invested in Mexico, both temporarily and permanently; the amount of profits in interest, dividends, or other forms, which were annually remitted to foreign countries on the account of temporary or permanent foreign investments in Mexico; and the amount of the net annual balance against Mexico.[1]

Second Subcommission. The work assigned to the second subcommission was concerned with the collection of information relating to the mining industry in Mexico, with particular reference to silver mining. Among the subjects to be investigated were: mineral production of Mexico, including amounts and quality of metals produced, and their territorial distribution; profits in mining enterprises, expenses of mining and refining, including an investigation of the number of laborers, their wages, and the cost of supplies, especially of supplies imported from gold standard countries; and the advantages and disadvantages resulting to mining properties from the fall in the price of silver.

Third Subcommission. The work assigned to the third subcommission is best summarized by the questions which it undertook to answer. They were:[2]

1. What is the amount and character of the metallic money in circulation in Mexico?

2. What is the direction of the monetary currents between the different parts of Mexico, and what are the costs and customary methods of transporting money?

3. Are the various kinds of metallic money, and the

[1] Com. Mon. Mex., Actas, etc., pp. 17–18, 145–56.
[2] Ibid., p. 122.

various denominations of bank notes which can be legally circulated, properly adjusted to the needs of the country?

4. Is there any periodicity in the increase or decrease in the number of the principal classes of population in the Republic? If so:

(1) What are the causes of this periodicity?
(2) What are its principal effects upon:
A. Bank discount?
B. Commerce?
C. Agriculture?
D. Industry?
E. Other transactions in general?

Fourth Subcommission. The program of the fourth subcommission was likewise outlined in the form of questions. They were:[1]

1. Has the rise in exchange protected and stimulated national production, and, if so, has this protection been beneficial equally to producers and consumers?
2. What are the effects of the rise in exchange upon the bringing of foreign capital into Mexico?
3. Is there a limit beyond which the continual decline in the gold price of silver or the rise in exchange will cease to benefit national production and come to have disastrous effects upon both producing and consuming classes?
4. What effects has the continual fluctuation in foreign exchange rates had upon all branches of public wealth, and especially upon commerce, the banks, and, in consequence, upon the money market, and in general upon all national interests?
5. Would it be possible to establish a more stable value relation between our monetary unit and the different monetary units of the foreign countries with which Mexico has commercial relations?

The findings of the first, second, and third subcommissions need not be summarized here. They will be found in full

[1] Ibid., pp. 67–112.

in the Monetary Commissions's volume on *Actas de las Juntas Generales*, to which frequent reference has been made. Considering the limited time available for the subcommissions' work, and the extreme difficulty in a country like Mexico of collecting data of this character, the work was well done. The student of Mexican monetary problems is largely dependent for his economic facts upon the data gathered, organized, and corrected by these subcommissions. This material has already been extensively utilized in the present paper and is drawn upon liberally in the discussion which follows.

Conclusions of the Fourth Subcommission. From the standpoint of the study of the principles underlying the Mexican monetary reform the report of the fourth subcommission is the most valuable. It covers 46 folio pages,[1] and its principal conclusions are summarized as follows:

1. That [during the period of rising exchange] national agriculture and cattle raising have progressed, increasing their production of articles of exportation and of home consumption.

2. That industries of every class have improved their condition, and new industries have been established; and that prosperity has arisen not only for those who labor with raw materials of home production, but also for those who labor with raw materials of foreign production and with raw materials of home and foreign production combined.

3. That the industry of land transportation, although it has received increasing gross and net profits per mile, in terms of silver, has suffered a diminution in its net profits per mile in terms of gold.

4. That the production of the country's argentiferous mines has been increasing despite the effects which the advance in exchange rates would have been expected to have; and that this advance has developed in an extraordinary manner the production of minerals containing gold, copper, and lead.

[1] Com. Mon. Mex., Actas, etc., pp. 67–113.

5. That there has been an enormous increase in the prices of articles produced abroad, since the fall abroad in the gold prices of these articles has not been sufficient to counterbalance the results of the rise in exchange.

6. That rural and urban real estate has increased in price, partly by reason of the depreciation of the peso, partly by reason of the building of railroads, and partly by reason of the purchase of lands opened for cultivation.

7. That wages and salaries of the consuming classes have scarcely been affected, continuing with very slight exceptions the same as they were before the decline in silver.

The fourth subcommission, in view of the results obtained, concluded that, although it was clear that the rise in exchange had protected and stimulated national production, these benefits had been effected at the expense of the consuming classes. The producing classes of the country, it said, moved by sincere sentiment have applauded each new advance in foreign exchange rates, because under the protection of this advance they have obtained greater prosperity. On the other hand, it said that "every advance in foreign exchange rates imposes an increasing burden upon the laboring classes, and, in general, upon all consumers who receive a salary or a daily wage."[1]

Foreign capitalists who had invested in the country, the fourth subcommission found, had suffered considerable losses, although in terms of silver there were apparent gains. It declared its belief

"that any measure that could be taken to change this condition of affairs and offer a guaranty of stability to foreign capitalists, would be extremely beneficial to the national interests, since nothing could contribute so much to the development of national wealth as an increasing investment of capital, and it is only from abroad that capital can come in abundance.[2]

[1] Ibid., p. 88. [2] Ibid., p. 89.

The subcommission expressed its strong conviction that in no case would national production permanently be benefited by a continual decline in the gold price of silver, and that there would always be a limit, "beyond which such a decline would turn into disaster for the producing and consuming classes of the Republic such beneficial effects as the decline up to the present time has produced." [1]

The belief was emphatically expressed that no one thing had caused greater disturbance and harm to the Republic than the continual fluctuation in foreign exchange rates; [2] and the subcommission declared it to be its opinion "without a moment's hesitation" that Mexico should procure "the greatest possible stability in the exchange relation of its money and the money units of the foreign countries with which it cultivates commercial relations." [3]

The Work of the Fifth Subcommission

When the four subcommissions had made their reports, a fifth subcommission was created to devise definite recommendations for monetary reform and to plan ways and means for carrying them into execution. This fifth subcommission consisted of the chairman of the Commission, the general secretary, and the chairmen and secretaries of the other four subcommissions. The vice president, Enrique C. Creel, and the pro-secretary attended the sessions of the fifth subcommission and took an active part in the discussions, thus making a *de facto* subcommission of twelve members.[4] A plan of work was drawn up covering four broad subjects, and each subject was assigned to a subcommittee of two or three members. The four subjects were stated in the form of questions, and each

[1] Com. Mon. Mex., Actas, etc., p. 90.
[2] Ibid., p. 93.
[3] Ibid., p. 94.
[4] Ibid., p. 158.

question was subdivided into a number of subsidiary questions.[1] Below are given the four main questions:

1. What is the monetary system whose adoption should be recommended to the Government?
2. What transitional measures should be adopted in order to put into force the system recommended?
3. What measures should be adopted in order to obtain stability in the international exchanges, upon the tentative assumption that the ratio to be adopted between gold and silver shall be 32 to 1?
4. Shall the adoption of special measures be recommended, as for example the abolition or reduction of taxes or other dues, in order to relieve not only the silver mines but export industries in general, of the burdens which might otherwise be imposed upon them by the monetary reform?

Upon all these questions but the third, with its various ramifications, there was substantial agreement. Upon the third question, however, which centered in the query whether or not a gold reserve fund should be established and used from the beginning, there was a sharp difference of opinion — a difference which could not be reconciled by extended debates, and which finally found expression in a majority and a minority report. Leaving the subject of the reserve fund until later, we may here consider briefly the subcommission's recommendations, which later became the recommendations of the Monetary Commission, on the other important topics covered by the subcommission's deliberations.

Recommends Abandonment of Silver Standard. There was only one dissenting vote[2] to the proposition that the Mexican mints should be closed to the free coinage of silver on private account.

Favors a New Silver Peso and New Fractional Coins. Upon the question as to whether a new silver peso should

[1] For the complete program of the fifth subcommission's labors, see ibid., pp. 158–59.

[2] This was the vote of J. de Landero y Cos. See ibid., p. 187.

be coined or the existing peso continued and put upon a gold basis, there appears to have been some discussion, but the opinion of the subcommission was strongly in favor of a new peso. Of course the continuance of the old peso would have been cheaper, and there was much sentiment in Mexico in its favor. As pointed out at the beginning of this paper, billions of these pesos had been coined, and they had carried the name of Mexico upon "an honest dollar" into the marts of nearly every section of the world. At this time, however, the Mexican peso was rapidly disappearing as a coin in foreign countries.[1] Its designs were not artistic, and the coins were easy to counterfeit. None the less it had been thought impracticable materially to alter them, since to do so would endanger the acceptability of the coins among orientals. Moreover, the Mexican peso circulating in Mexico in the future was to be a fiduciary coin circulating at a gold value substantially above its bullion value; and if the old pesos were continued in circulation, it was thought that there would be grave danger that large quantities of them would be smuggled in from the Orient to take advantage of their monopoly value in Mexico.[2] Accordingly the fifth subcommission recommended the temporary suspension of the coinage of Mexican pesos, and the prohibition of their importation into Mexico. As a substitute for the old peso in circulation it proposed the coinage of a new peso of the same fine silver content as the old one but with a millesimal fineness of .900 instead of .90278.

Fractional silver coins of the denominations of 50 cents, 20 cents, and 10 cents, and suitable minor coins of 5 cents and 1 cent were recommended. These fractional silver coins were to be .800 fine and all were to weigh 25 grams gross to the peso. They were, therefore, unlike the old fractional

[1] See Andrew, The End of the Mexican Dollar, in Quart. Journ. Econ., XVIII, 1904, pp. 321–56.

[2] Cf. Com. Mon. Mex., Actas, etc., pp. 161–62.

silver coins, to be of lighter proportionate weights than the peso and of a lower millesimal fineness. Upon this basis a peso in fractional coins would contain approximately 18 per cent less pure silver than the peso piece — a good insurance margin for the fractional coins in case a rise in the price of silver should threaten the peso pieces with the melting pot.[1]

Favors Indian Plan for Attainment of Gold Standard. As the fundamental basis for the new monetary system the fifth subcommission recommended a fixed parity between gold and silver, the value of the gold unit to be based upon the average gold price of the Mexican peso in foreign markets during the preceding ten years, with an agio not to exceed ten per cent.[2] It recommended that the gold coins when minted should be .900 fine, and that an effort should be made to assimilate the unit with some important foreign monetary unit, preferably the American dollar — a recommendation which meant that the monetary unit should be made as nearly as practicable the equivalent of 50 cents United States gold. Both gold and silver pesos were to be unlimited legal tender, while fractional silver coins were henceforth to be legal tender only in limited amounts.[3]

The majority of the fifth subcommission declared that there were many reasons why the Republic should not go at once to the gold basis with gold coin in circulation. The two chief ones were: (1) Although Mexico produced 21.9 millions kilograms of gold during the fiscal year 1903, all of that production had been exported, and therefore, in order to get gold for monetary circulation, it would be necessary for the Government to buy it in the open market, and this would impose a heavy financial sacrifice upon the country. (2) Mexico, being one of the largest silver-

[1] Cf. infra, pp. 538–42.
[2] Com. Mon. Mex., Actas, etc., p. 201.
[3] Ibid., p. 202.

producing countries in the world, was interested in the maintenance of the value of the white metal, and for her to adopt outright the gold standard with gold coins in circulation would be to accentuate the decline in the price of silver; first, because of the moral effect it would produce upon the weak and highly sensitive silver market; and second, because substantial sums of silver would have to be withdrawn from circulation in Mexico within a short time, and the country's monetary demand for silver would be reduced in the future.[1]

Throughout the transitional period no gold was to be coined. Although there was some difference of opinion upon this subject,[2] the majority reasoned that, if free coinage of gold were permitted, either gold would be brought to the mint for coinage or it would not; in the latter case, the privilege would be of no account; in the former, the introduction of new gold coins into circulation would interfere with the relative contraction of the currency which was looked upon as the *sine qua non* for raising the value of the silver pesos to the new gold par.[3]

The Question of Justice between Debtor and Creditor. The question of justice in the settlement of preëxisting contracts between debtor and creditor, after the new unit of value should be substituted for the old, was considered by the fifth subcommission in connection with the proposal to redeem the old currency in the new at a discount. On this subject the majority said:

"The point of view of justice in the relations between debtors and creditors is also important. It is clear that debtors in paying old debts at par in the new peso which has a

[1] Com. Mon. Mex., Actas, etc., p. 188.

[2] Cf. opinion of Joaquin D. Casasus. Ibid., pp. 173 and 181. Mr. Casasus's dissenting opinions are very able. He was chairman of the fourth subcommission and a member of the fifth subcommission. His writings and the report of the fourth subcommission have been republished in both Spanish and English in a volume entitled La Reforma Monetaria en Mexico.

[3] Com. Mon. Mex., Actas, etc., p. 197.

greater value in gold for commodities in international trade will be giving a coin of better quality, and therefore one held in greater esteem, than the old one, and that as a result creditors *pro tanto* will be benefited. It must not be forgotten, however, that for the great majority of debtors and creditors, the better quality of the new coin will be, so to speak, neither tangible nor appreciable, since they have nothing to do directly either with the exchanges nor with international trade. They would, therefore, understand with much difficulty, if they understood at all, the reason for the discount on the old coins; and in the meantime creditors (and who is not a creditor at least for a small salary or a petty wage?) would complain of an injustice irritating because inexplainable. . . .

"It will not be overlooked in truth by the enlightened and cultured part of the nation, that in time there will result a reduction in the cost of living; . . . but at first there will be no such reduction, if one may judge by the universal experience of other countries, in salaries or wages — a situation which incidentally will benefit the disinherited classes. Moreover, the reduction, coming as it will as the result of competition and not of impoverishment, will come slowly, and under conditions which will not be disturbing to any one, since the old debts will have been slowly liquidated.[1]

In the interpretation of this recommendation of "a let alone policy" as regards existing contracts, and of the ultra optimistic reasoning by which it was supported, the reader will observe that such a policy was more easily justified in Mexico than it was in the Straits Settlements currency reform,[2] or than it would have been in that of the Philippine Islands.[3] A reference to the chart (page 535) will show that in the fall of 1903, when the Mexican Monetary Commission was deliberating, the bullion value of the peso rose to a maximum of over 49 cents (United States currency); so that the margin between the peso's "natural value"

[1] Ibid., p. 199. [2] Cf. supra, pp. 433–39. [3] Cf. supra, p. 339.

shortly before the reform was expected to be inaugurated and the gold value to which it was ultimately to be raised by relative contraction was a very small one. The smallness of this margin, the length of time which it was expected would be required to raise the peso to its gold par, and the wide fluctuations in the gold value of the peso to which the country had long been accustomed, coupled with the reasons above cited by the fifth subcommission, appear to be sufficient justification for the failure to recommend the adoption of any plan to secure greater justice for the debtor by authorizing settlements in the new currency according to some plan of discounts based upon what the value of the old peso probably would have been had the currency reform not been inaugurated.

Other Transitional Matters. According to the fifth subcommission's recommendations, the National Government was to take reasonable action "to obviate, or at least to mitigate, the temporary loss or harm that may accrue to some of the interests connected with silver mining and the industries that produce articles for exportation, as a consequence of the stabilization of exchange." [1]

In order to expedite the recoinage, and to free the Government from the necessity of buying silver with which to start coining the new money, it was recommended that the banks be authorized to substitute in their vaults, for a part of their legal metallic reserve, special exchange certificates to be issued by the Government, thereby releasing for recoinage a continuing fund represented by the amount of the certificates.[2]

The Question of a Gold Reserve

Upon the essentials of the above recommendations, and some minor ones not mentioned here which can best be

[1] Com. Mon. Mex., Actas, etc., p. 203.

[2] Ibid., p. 198. A similar recommendation was made by the minority. Ibid., pp. 186–87.

considered in connection with the subsequent legislation, the members of the fifth subcommission were nearly unanimous. We now come to the question of the immediate establishment and use of a substantial gold reserve, the crucial question upon which, with its related questions, the opinion of the Commissioners was strongly divided. Into the details of this long and ably-conducted controversy we cannot go. It will be sufficient to state the recommendations of the majority and those upon which there was widest agreement among the minority, and to give a brief summary of the principal reasons advanced in support of each plan.

The majority (*i.e.*, 7 members) of the fifth subcommission recommended: that as soon as the Government should have in readiness enough of the new coins to begin putting them in circulation, it should direct that they be given out in exchange for such of the old coins as were legally circulating in the country. The exchange was to be effected at par at as large a number of places as possible so as to accomplish the conversion in the shortest possible time and to minimize public inconvenience.[1] The Government was to put into circulation only such an amount of the new pesos as should be necessary for the redemption of the old money; and care was to be taken to prevent any excessive issue of fractional money.

"When the exchange shall have been effected, the Government shall not place in circulation any additional silver pesos, without receiving in Mexico or abroad the equivalent in gold bars or gold coin at the established ratio, plus an additional amount sufficient to cover transportation, insurance, and other expenses, if the delivery is made outside of the Republic."[2]

[1] Redemption at a discount, it was reasoned, would involve the Government in a moral obligation to redeem the new coins in gold — an obligation which the majority did not think should be assumed at that time. Cf. ibid., p. 199.

[2] Ibid., p. 202.

While recommending that the Government begin to accumulate a reserve out of surpluses and profits accruing from the minting of the new coins, the majority were opposed to the Government's incurring any obligation whatever for the redemption of the new money in gold. Their plan was the Indian plan of relative contraction, whereby they hoped to raise the gold value of the peso from bullion value to the new gold par; *i.e.*, from an equivalent of $43\frac{1}{3}$ cents United States currency on December 11, 1903, when their report was dated, to 50 cents, or an increase of $15\frac{1}{2}$ per cent.

"In principle," they said, "no attempt ought to be made to bring about brusquely and without a transition period, by direct action of the Government, the legal parity between gold and the silver peso. Private interests, which of necessity will be affected by the new monetary system, though temporarily, should be given an opportunity to adjust themselves to it gradually and spontaneously." [1]

On this vital point of the disagreement, however, the majority wavered, for they declared:

"Notwithstanding what has just been said, if the mere closing of the mints, and the other general measures which the Government may adopt in the direction above outlined, shall prove inadequate, and if the attainment of the legal parity between the gold and the silver peso shall be delayed longer than the Government judges prudent under the circumstances: then the surest means for bringing about that parity will consist in increasing the amounts paid into the reserve fund by a sum sufficient to influence the international exchanges in the home market. . . ." [2]

This influence was to be exercised through the machinery of a gold-exchange standard. Referring to the above contingency, the majority said:

[1] Com. Mon. Mex., Actas, etc., p. 203. [2] Ibid., p. 203.

"The object of the reserve fund is the sale, when deemed advisable, of gold drafts on foreign countries to satisfy the needs of international exchange, at rates that will improve the rates in the Republic's home market, with the constant aim of establishing gradually the legal parity between gold and silver pesos, or of maintaining this parity when once it has been established."[1]

The foreign drafts were to be paid for cash down in silver pesos, which were to be placed in the reserve fund and not to be paid out again except against gold deposited to the credit of the reserve fund either at home or abroad.

The Minority Report. The report of the minority of the fifth subcommission favoring the establishment of a gold reserve fund was signed by four members,[2] and to their plan a fifth member subscribed with the qualification that, though opposed to the monetary reform, he was in accord with the general features of the minority project, if the reform were to be made.

Of the minority plan the chief features were as follows: A reserve fund amounting to 30 per cent of the sum of the new coins which were to be issued (*i.e.*, a reserve of about P 40,000,000) was to be established,[3] part of which was to be kept in Mexico and part abroad. The reserve fund was to be accumulated gradually during the period of transition, which in no case was to exceed three years. It was to be a trust fund, separate from other government funds, and administered by a special commission. During the transition period the reserve was to be used to aid the gradual raising

[1] Ibid., p. 203.

[2] Ibid., pp. 182–87.

[3] This reserve was to be obtained from four sources: (1) Extraordinary sources, either the nation's treasury reserves or the proceeds of a loan of a transitory nature; (2) Seigniorage profits on the new coinage; (3) Interest received from deposits in banks at home and abroad; (4) Three per cent of the import duties which ought to be paid in gold, at the legal parity, this sum to be utilized for the amortization of the debt contracted, if it should become necessary to have recourse to a loan for the creation of the reserve fund. Ibid., p. 186.

of the gold value of the peso by the sale of drafts on that part of the fund located in foreign countries, until exchange rates on New York and other foreign places should reach the legal parity plus 2 per cent; thereafter the fund was to be used to maintain stable international exchange rates at this level through the mechanism of the gold-exchange standard.[1]

Arguments Advanced by Majority. In support of their "let alone" plan of relative contraction without the immediate use of a reserve fund, the majority offered the following line of argument:[2] The closing of the mints to the free coinage of silver and also of gold would place a positive limitation upon the currency supply.

"Following this principle of limiting the quantity of money, a principle which in our judgment is demonstrated by the experience of all nations, and established by the teachings of economists, it is possible to disassociate the value of silver coins from their mere bullion value, and even to raise them, in comparison with gold, to the level of value established by law; provided only that the quantity of money in circulation be proportionate to the demand, or, in other words, that the quantity of money be not excessive, in relation to the needs which it is destined to satisfy. But what are these needs in the case of a given nation or people? We believe that theoretically they are almost impossible to determine, since they depend upon causes complex and variable beyond measure, such as the number and character of the transactions into which money enters, the coefficient of rapidity of monetary circulation, which in a large degree depends upon the greater or less extent to which credit instruments in their manifold forms are employed, the degree of wealth and enlightenment of the mercantile community and of the people in general, and even the inclinations and preferences of people which are often unknown and for which even when known, it is not easy always to assign a satisfactory and rational explana-

[1] Com. Mon. Mex., Actas, etc., p. 186. [2] Ibid., pp. 187-201.

tion. Experience therefore seems to be the only norm to follow in so delicate a matter; and this is especially true in the case of Mexico, since we lack information concerning the most elementary facts of the problem." [1]

The conclusion was that the only safe course to follow at the beginning was to close the mints and see what happened, shaping future action to conditions as they should develop. It was admitted that a reserve fund would be the most efficacious means that could be adopted to secure legal parity with promptness; but this very promptness was declared to be the greatest drawback of the plan because of the shock it would give to business, especially the silver industry and the export trade. Time was needed to make possible a gradual adjustment to the new conditions, and this would be given only by the slower plan of relative contraction.

The suggestion of the minority, that the reserve might be used to bring about a gradual rise in the value of the peso with a certain degree of prearranged regularity,[2] was characterized as very dangerous, since it would place either in the hands of the government authorities or in a special body appointed by them the absolute control of the exchange market, and would lead to ruinous speculation in foreign exchange for a rise in the value of the peso.[3]

It was argued further that the establishment of such a reserve fund would increase the public debt and be unpopular; also that if a reserve should be established and, as a result of a strongly unfavorable trade balance, its amount should prove inadequate, or, of equal importance, if capitalists should fear that it would prove inadequate, there would result a lack of confidence in the reform which

[1] Ibid., p. 190.

[2] Cf. plan adopted in England in 1819 on the recommendation of Ricardo for gradually bringing Bank of England notes back to par. A. Andreads, History of the Bank of England, p. 241; also A. M. Lindsay, Ricardos Exchange Remedy, pp. 5–8.

[3] Cf. experience of the Straits Settlements in 1905–06, supra, pp. 411–17.

would drive capital out of the country, and might cause the whole reform project to end in disaster.

None the less, as we have seen, the majority wavered, and to be on the safe side recommended that the legislative measures to be passed for the execution of the reform should include the giving of authority to the Executive to create a gold reserve fund, should subsequent experience indicate that such a course was desirable. This recommendation the majority considered merely

"a prudent course, like that of a commanding general, who considering victory sure by only using a portion of his forces, should decide not to bring all of his army into action, but rather to hold in reserve a portion of it, possibly the best portion, in order to be ready for unexpected emergencies, not arrogantly trusting that these emergencies would not rise, simply because he could not foresee them." [1]

Arguments Advanced by Minority. The minority believed the plan of the majority to be dangerous, weak, and vacillating. While they did not doubt that the value of the peso could ultimately be raised by relative contraction to the legal gold par, they believed that the process would be a long and economically painful one, as had been the experience of India under the same plan between 1893 and 1898,[2] and they believed that the vacillation of the majority in the matter of the reserve fund would weaken public confidence in the reform plan, keep foreign capital from coming into the country, and in other ways interfere with the successful execution of the plan. Among the more important specific arguments advanced by the minority or by individuals signing the minority report the following may briefly be cited.

In Mexico any considerable relative contraction of the currency would be accomplished very slowly, and even

[1] Com. Mon. Mex., Actas, etc., p. 196.
[2] Cf. supra, pp. 35–69.

when the legal parity was once attained, there would be for a long time a danger that the gold value of the peso would again decline under the influence of recurring strongly unfavorable trade balances. The minority report was dated December 5, 1903. A reference to the chart (on page 535) will show that for that month the bullion value of the Mexican peso varied between 45.5 cents and 43.1 cents United States currency, the range for November having been 47.6 cents to 45.2 cents, and that for October 49.1 cents to 47.3 cents. The tendency therefore appeared to be downward. To raise such a peso solely by relative contraction to a 50-cent level, and to establish it there securely, appeared to the minority a slow process. The annual coinage of silver in Mexico was large, varying from a minimum of P18.1 millions to a maximum of P30.2 millions during the twenty years 1882–83 to 1901–02, the average being P24.2 millions. But nearly all of this coin was exported. In fact for three years of the period the exports exceeded the coinage, and for the twenty-year period the annual exports varied from P10.9 millions to P27.2 millions, the average being P19.6 millions. This left an annual average net increase in the coin circulation of only P4.6 millions,[1] representing approximately 3½ per cent of the estimated total coin in circulation (*i.e.*, of P130 millions).[2] If closing the mints lessened the relative monetary supply only by this small amount each year, how long, the minority asked, would it require to raise the

[1] The majority claimed that this figure (or more correctly the P5 millions cited by the minority as the average annual increase for the past 25 years) was an understatement, since it neglected the substantial recent annual additions to the net bank-note circulation, which had been during the preceding five years, 1898–1903, respectively, in millions of pesos (round numbers), 11.8, 14.6, 15.0, 31.5, and 28.9. Cf. Com. Mon. Mex., Actas, etc., p. 194; also Com. Mon. Mex., Estadística Bancaria, in which detailed figures for bank-note circulation by months since 1882 will be found. But cf. infra, pp. 526–30.

[2] Cf. memorandum of Joaquin D. Casasus, in Com. Mon. Mex., Actas, etc., p. 178.

peso to the new gold par solely by rarefication. But this was only part of the story. Against rarefication three forces would continually be working: (1) a tendency for an increasing rate of monetary turnover; (2) an ever increasing use of credit instruments as media of exchange; and (3) the inhibiting effects upon business, and therefore upon the growth of the demand for exchange media, resulting from the depressing influence of currency contraction.

Among the positive evils of such a long drawn out transition period, the advocates of a gold reserve, having reference to the experience of India, mentioned high and rising interest rates, slowly falling prices, slowly increasing burdens upon the export trade and upon silver mining, uncertainty in all lines of trade, lack of confidence in the Government, and the discouragement of the investment of foreign capital in Mexico.[1] They also laid emphasis upon the fact that because of the large amount of foreign capital invested in the Republic the balance of trade was normally strongly against the country, and that, with a fiduciary currency and no gold reserve, the country would be deprived of a means of settling unfavorable trade balances, and of elasticity in its internal circulation. With a gold fund, gold could be exported to settle trade balances, and this would contract the circulation by the amount of silver presented for the gold to be exported, thus making the adjustment an automatic one and maintaining an equilibrium in the currency supply.[2] A careful and far-sighted administration of the reserve, they said, would correct the irregularities of the strong seasonal swings which prevailed in Mexican exchange, and which would result in serious evils under the rigid system proposed by the majority.[3]

[1] Com. Mon. Mex., Actas, etc., pp. 182-87.
[2] Ibid., p. 184.
[3] Cf. G. Raigosa's memorandum, ibid., p. 170.

Mexico's financial condition was sound, and it was claimed she could well afford the expense of establishing a gold reserve at once, especially since a substantial part of the necessary funds would in a short time be obtained from seigniorage profits, interest on that part of the reserve fund held abroad, and exchange premiums.

To the argument of the majority that the use of a reserve fund to expedite the attainment of the legal parity would make the transition too sudden and cause harmful shocks to business, it was replied that, if properly managed, the various steps in raising the gold equivalent of the peso through the sale of drafts at declining rates on the gold reserve fund would not be great enough to cause serious disturbance in a country so accustomed to pronounced exchange fluctuations as was Mexico. Furthermore, under the plan of the majority, as well as under that of the minority, there would exist a tendency to speculate in exchange for a rise in the gold value of the peso, so that this argument of threatened speculation was a sword that cut both ways.

Confidence both at home and abroad in the success of the reform, the minority claimed, would be strengthened greatly by positive action at the beginning in the direction of building up and using an adequate gold reserve. On this subject they said, having reference to the wavering attitude of the majority:

"The success of every currency reform necessarily depends upon the confidence which the public place in the new currency and in the certitude which it may entertain concerning the stability of its value. One cannot understand how these conditions could be fulfilled by the measures which the majority of the fifth subcommission have seen fit to recommend to the Government, since they hint at the possibility that the legal parity between gold and silver will not be secured by the plan they recommend, and outline subsidiary means that ought to be adopted in such a con-

tingency. The majority of the fifth subcommission declares that in case the establishment of the legal parity between gold and silver is much delayed, the surest method of obtaining that parity would consist in adding to the gold reserve fund a sum sufficient to influence the home market in the direction of giving the desired stability to the rates of exchange. Therefore the majority undoubtedly fear that the mere suspension of the free coinage of silver will not suffice for the object proposed. Now does this declaration not move in the direction of destroying in advance the confidence with which the public ought to be imbued in the success of the monetary reform about to be undertaken?"[1]

In the judgment of the writer, the logic of the argument was in favor of the minority; so likewise was the teaching of the Indian experience from 1893 to 1908.[2] Of like purport later, under similar circumstances, came the lessons of the Straits Settlements reform of 1905–06.[3] But the logic of unexpected developments in the silver market was with the majority. They builded better than they knew. How this happened will appear in the course of the narrative of events to which we shall now return.

The Monetary Commission's Report

On February 11, 1904 the report of the majority of the fifth subcommission was formally approved as the report of the Commission.[4] Upon that date the Commission's full report was made to Finance Minister Limantour, and the Commission, having completed its labors after almost a year of work, was dissolved.[5]

[1] Com. Mon. Mex., Actas, etc., p. 184.
[2] Cf. supra, pp. 35–69.
[3] Cf. supra, pp. 410–19.
[4] Com. Mon. Mex., Actas, etc., p. 235.
[5] Ibid., pp. 236–37.

CHAPTER IV

A Gold-Standard Plan Adopted

The Government took the report of the Commission under advisement, but no definite action was taken until May 21, 1904, when a preliminary decree was issued under authority of the budget law of that date imposing an import duty of P 10 per kilogram on Mexican silver pesos when imported in quantities greater than five pesos. This duty, which amounted to about 27 per cent, was not to go into effect until January 1. On November 16, 1904 Finance Minister Limantour submitted to the Mexican Congress a bill embodying a plan of currency reform modeled closely upon that recommended by the Monetary Commission,[1] and in the preamble to the bill the Minister gave an admirable review of the entire currency problem in Mexico, and an explanation of the reasons underlying the various provisions of the bill.[2] Inasmuch as this bill, which was very brief, laid the foundations upon which the entire currency reform was constructed, it will be well to give it substantially in full.[3]

Art. 1. Authority is given to the Executive of the Union to reform the monetary laws of the Republic, determining the kinds of money which shall legally circulate, the value, weight, fineness, and other characteristics; including

[1] El Economista Mexicano, Nov. 19 and 26, 1904.

[2] The preamble and bill are given in full, in Secretario de Estado y del Despacho de Hacienda y Credito Publico, Seccion Cuarta, Leyes y Disposiciones Relativas a la Reforma Monetaria. This document will be cited hereafter as Leyes y Dispos., etc. An English translation is given in Int. Exch. Com., Rep. 1904, pp. 423–50.

[3] Leyes y Dispos., etc. pp. 31–32.

the fixing of the limits of tolerance for their coinage and their circulation, and in general to make such regulations as he may judge necessary to perfect the country's monetary system, and to adapt it to the economic needs of the Republic. In the exercise of these powers the Executive will be subject to the following rules:

A. The present peso containing 24.4391 grams of pure silver [corrected in the subsequent Act to 24.4388], and 2.6342 grams of copper, shall be retained and shall be unlimited legal tender.

B. This peso shall be given a value equivalent to 75 centigrams of pure gold [*i.e.*, 49.85 cents United States currency].

C. Fractional silver coins shall contain smaller quantities of silver in proportion to their value than the peso. [Formerly, as we have seen (pages 504–505), their fine silver contents as compared with that of the peso were almost exactly proportionate to their respective values.]

D. Fractional silver coins shall not be legal tender for sums larger than P 20 in one payment, and bronze coins in sums larger than one peso; but the Government will designate offices where the public may freely exchange for silver pesos fractional coins of silver or bronze when presented in sums of P 100 or multiples thereof.

E. The mints shall not be obliged to coin precious metals presented to them, but the issuance of coins of all classes shall be reserved to the Executive; and it may exercise this power in accordance with law and on such occasions and in such quantities as it may prescribe.

F., *G*., *H*., and *I*. [These sections give authority to the Executive to reduce or otherwise modify the taxes, fees, etc. imposed by the Government on mining and on articles used in mining.]

J. To organize offices, which, without loss to the public treasury, may advance money upon the security of silver bars, and to apportion to those interested facilities for the sale of said bars under the best conditions possible, and, with this end in view, to make suitable arrangements both in the Republic and abroad.

K. To modify civil and mercantile legislation in matters concerning loans and the payment of money.

L. To modify the precepts of the banking law, which are directly or indirectly connected with the circulation of metallic money, or which affect instruments of credit or exchange operations.

LL. To create a committee whose functions shall be to regulate the monetary circulation, and to obtain, so far as possible, stability in the rates of foreign exchange; and with this object the Executive shall have authority to confer upon this committee such powers as it considers suitable, and, at the proper time, to entrust it with the management of a special fund, which shall be established by the Executive.

M. To issue all suitable regulations, such as are intended to repress and punish misdemeanors and crimes connected with the subject matter of the law; to organize the services and the offices which may be necessary, and to defray the expenses incurred for any of the aforementioned purposes. To this end the Executive may discontinue or modify the present distribution of offices, their personnel, and the appropriations and disbursements authorized by the budget of expenditures.

These were exceedingly broad powers for the legislature to confer upon the Executive — much broader in fact than would be thought of in an Anglo-Saxon country — but in Mexico in those days of President Diaz the Executive absolutely dominated the Legislature. We need not be surprised to learn that the plan proposed by the Finance Minister was adopted unanimously and without discussion by both houses of the Mexican Congress,[1] becoming law December 9, 1904.[2]

The Existing Peso to be Retained

This currency reform Act, or, more correctly, currency reform enabling Act, in the few positive provisions it

[1] Hegemann, p. 147.

[2] The text of the law is given in Leyes y Dispos., etc., pp. 39–41.

contained, and in its implications, conformed with the recommendations of the Monetary Commission; the only important divergence being the provision of subsection *A*. of Article 1, providing for the retention in circulation of the existing Mexican peso,[1] whereas the Commission had recommended the coinage of a distinctively new peso.

In support of his recommendations for the continuance of the old peso, Finance Minister Limantour called attention to the long-continued use of the existing peso in Mexico, and the urgency of respecting the traditional custom of the people. The desire to avoid any cause for alarm or distrust, he said, had caused the Executive to propose the retention of the present Mexican peso without any alteration, at least for some time, while the workings of the new system were being observed. He could see no reason for adopting the Commission's recommendation for a peso of the same weight but of a new design, involving the expense of the recoinage of the entire peso circulation of the country, except the desire to prevent the fraudulent reimportation of Mexican pesos from abroad. The danger of such fraudulent importation he believed to be very slight for two reasons.[2] The first was "the constant absorption of silver, and particularly of Mexican pesos, by the countries of Eastern Asia. None of the white metal which penetrates into the interior of those regions ever comes forth again. It appears as if it were lost or destroyed, or modified in such a manner as to blot out all traces of itself." The second reason was the fact that the profit on smuggling would be too small to justify the expense and risks, the difficulty of reimportation being enhanced by the fact that in the East many of these coins had been so "chopped" and otherwise marked by local banking establishments that their contraband

[1] Even this provision was optional, since the Executive was authorized by the law to substitute a new peso for the old one if he should think desirable.

[2] Leyes y Dispos., etc., pp. 22–23.

character would quickly be revealed, were attempts made to smuggle them into the country.

Reception of the Proposed Enabling Act

The introduction in the legislature, November 16, 1904, of the bill which later became the enabling Act was immediately followed by a substantial rise in the gold value of the peso as measured by New York exchange rates (see chart on page 535). For the week ending November 12, 1904 the average rate on New York for bank drafts was 215 (*i.e.*, P 215 for $100, representing a value of $0.4652 to **P** 1); it dropped to 208½ (*i.e.*, $0.4796 to P 1) for the week ending November 26. Part of this advance in the gold value of the peso was doubtless due to the rise in silver at that time resulting from the Russo-Japanese war; but it is noteworthy that the decline in the exchange rates began before the advance in silver,[1] and that the margin between the exchange value of the peso and the bullion value was an increasing one.

In addition to the favorable movement of exchange there was other evidence that the announcement of the plan in-

[1] The situation is shown in the following table:

DATE, 1904	BULLION VALUE OF PESO U. S. CURRENCY			EXCHANGE ON N. Y. AVERAGE	
Week Ending	High	Low	Average	Rate Value of $100	Value of Peso
	Cts.	*Cts.*	*Cts.*	*P*	*Cts.*
Nov. 5	46.41	46.08	46.34	215.62	46.38
Nov. 12	46.29	46.08	46.18	215.00	46.52
Nov. 19	46.29	46.18	46.27	209.00	47.85
Nov. 26	46.94	46.29	46.68	204.25	48.92
Dec. 3	47.27	46.61	46.99	203.75	49.09

Figures for bullion value are based upon daily quotations for London price of standard silver, prompt delivery. Figures for exchange on New York were furnished the writer by the National Bank of Mexico.

spired the business community with confidence. The prices of Mexican securities the latter half of November tended upwards.[1] The London *Economist* said in its issue of November 19, "There are grounds for believing that Mexico is getting into a vigorous stride of prosperity, which bids fair to overstep all earlier bursts of advance that the country has experienced in years gone by."[2] Reference was made in the article from which this quotation is taken to the prospects of the new monetary system being at once adopted, and the article concluded with a statement that "It is significant that the Mexico 3 per cent internal bonds, the interest upon which is payable in silver, have risen recently from about 24½ to 31½, the movement being based upon advanced speculation as to the adoption of a gold standard." *El Economista Mexicano* in its issue of November 26, 1904 quoted from a railroad authority writing in the *Mexican Herald* "the opinion that the monetary reform would notably stimulate the development of the railroad business in Mexico,"[3] and giving as one reason the fact that the railroads had suffered greatly in the past because their incomes were in silver and a large part of their expenses were in money of the United States.

Promulgation by the Executive of the New Currency System

The enabling Act was passed December 9, 1904. A series of executive decrees issued under its authority the latter part of March 1905 promulgated definitely the new currency system.[4] The most important of these decrees was the first of two decrees dated March 25, 1905. So closely did the decrees follow the recommendations of the Monetary Commission already discussed, that it is un-

[1] Cf. figures cited by Hegemann, p. 147.

[2] Page 1858.

[3] Page 170.

[4] These decrees and all others concerning the currency reform down to July 1906 are published in Leyes y Dispos., etc.

necessary to review their provisions in any detail. Their chief points, however, may briefly be summarized as follows.

They called for the raising of the peso by relative contraction of the currency to a value equivalent to that of 75 centigrams of pure gold, and for the ultimate maintenance of the fiduciary circulation at a fixed par with gold by means of the principle of the gold-exchange standard. The existing Mexican peso was to be continued in circulation as unlimited legal tender money, but its free coinage for circulation in Mexico was to be discontinued after April 16, 1905.[1] To the Executive alone was given the privilege of having money coined. This meant that the privilege of free coinage was denied not only to silver, but for the time being also to gold. The new gold coins were to be .900 fine, issued in denominations of P5 and P10, and to be unlimited legal tender. Unless otherwise ordered the coinage of gold money was to be limited to the quantity necessary to redeem the gold money of the old system which remained in legal circulation July 1, 1906.[2] From the date on which the law should go into effect (*i.e.*, May 1, 1905), and except in case of recoinage, new silver money was to be coined only in exchange for gold coins or bars at the legal rate of 75 centigrams of pure gold to the peso, and the gold so received was to be used to purchase silver bars from which to coin the necessary silver pieces, until the amount desired should be provided.[3] The existing subsidiary coins were to be withdrawn from circulation, and for them were to be substituted new subsidiary coins of lighter weights (*i.e.*, 385.8 grains gross, to the peso instead of 417.8), and of lower millesimal fineness (*i.e.*, .800 instead of .9028). Subsidiary coins were not to be issued except for the purpose of recoinage or in exchange for gold at the legal rate. The Executive was

[1] Ibid., pp. 48 and 53.

[2] The amount of gold in the banks and public treasuries of Mexico at the end of 1904 as reported by the Director of the U. S. Mint in his Report for 1905 (p. 38) was but $8600.

[3] Leyes y Dispos., etc., pp. 48–49.

authorized to issue coins of nickel and bronze, but there was a strict limitation upon the amount.[1] The decree prohibited under heavy penalties "the employment as conventional symbols, in substitution for legal money, of counters, tallies, small plates, or other objects of any character whatever."[2]

Restrictions Placed upon the Issue of Bank Notes

The above-mentioned rigid limitations placed upon the amounts of money that could be coined, and the prohibition on the use of money substitutes, were of course motivated by a desire to prevent any increase in the circulating medium which would interfere with the operation of the plan of raising the value of the peso by a relative contraction of the currency supply. One difficulty that confronted the authorities in this connection was the danger that the desired rarefication of the currency would be prevented, or at least hindered, by increases in the issue of bank notes. The law of March 19, 1897[3] prohibited banks of issue from issuing bank notes in excess of three times their paid-up capital, the legal minimum capital at that time being P 500,000.[4] It also provided that the note issue, together with the deposits[5] payable on demand or at not more than three days' notice, should not exceed "twice the holdings of the bank in cash and gold and silver bullion." The notes could not be issued in denominations less than P 5 and were not legal tender. They were redeemable on demand at the

[1] Leyes y Dispos., etc., p. 49.

[2] Ibid., p. 51.

[3] For copy of law, see Charles A. Conant, The Banking System of Mexico, pp. 172-213.

[4] A discussion of the limitations placed upon the issue of bank notes in Mexico will be found in Jean Favre, Les Banques au Mexique, pp. 39-42.

[5] The word deposit here was given a narrow meaning which excluded current accounts arising from loans — the largest part of the commercial deposits, using the word in the sense customary in the United States. Cf. law, chap. 2, arts. 16 and 17.

head office of the issuing bank, but each branch was required only to redeem its own notes. Charters of banks of issue in no case could run beyond 30 years. Important special privileges, chiefly consisting of exemptions from taxation of certain kinds,[1] were conferred upon banks chartered under the law of 1897. The bank-note circulation of Mexico had grown very rapidly in the years immediately preceding the currency reform. At the end of January 1890 there were in the Republic five banks of issue having a total outstanding circulation of P 21.1 millions, and against these notes and other liabilities these five banks held cash reserves of P 15.1 millions, leaving an uncovered circulation of P 6 millions.[2] By January 1, 1905, about three months before the new currency decree was issued, the number of banks of issue had increased nearly fivefold, and the bank-note circulation had risen from P 21.1 millions to P 83.5 millions,[3] the cash reserves (exclusive of bank notes of other banks) having risen to P 76.8 millions. The increase in the uncovered circulation, therefore, was only slight, *i.e.*, from P 6 millions to P 6.7 millions. Meanwhile, however, deposits of various kinds, including current accounts, had increased from P 25.3 millions January 31, 1890 to P 221 millions.[4] At the beginning of 1905 the paid-up capital of the banks of issue was P 87.4 millions, so that taken together the total amount of notes outstanding was less than one third the limit fixed by the law of 1897, *i.e.*, than an amount equal to three times the paid-up capital. Moreover, on the basis of legal reserve requirements the authorized limit of circulation of all banks taken together, without any increase of total reserves, would have been over sixty million pesos more than the amount outstanding, or a sum considerably greater than the total metallic circulation of the country

[1] Conant, The Banking System of Mexico, p. 15.
[2] Com. Mon. Mex., Estadística Bancaria, pp. 214–15.
[3] Conant, The Banking System of Mexico, folder No. 4; also pp. 54–59.
[4] P 214 millions of this sum are designated as "various debts," but apparently consist chiefly of active current accounts.

outside of the reserves of the banks of issue. Such a possibility for currency expansion clearly threatened the success of any plan of relative contraction through limitation of coinage alone.

How did the Government meet this difficulty? It met it chiefly by means of the following measures, a brief mention of which will be sufficient, since the immediate result in each case was the obvious one. They were: (1) Insistence upon a somewhat broader interpretation of the term *deposits* in connection with the provisions of the banking law concerning legal reserves against deposits, thereby increasing the legal reserve requirements for banks of issue [1] and further limiting the issue of bank notes. (2) Withdrawal from the banks of the privilege given them, under the Act of March 19, 1897, of counting silver bars as part of their reserves; and withdrawal of the privilege of counting gold bars, until such a time as the free coinage of gold should be authorized.[2] Concerning the use of gold bars the preamble of the decree said that, while free coinage of gold did not exist, it would be contrary to the fundamental principle of the new currency legislation to permit banks of issue to count gold bars as part of their reserves; since, although the owners of these bars would have the legal right to have them redeemed in silver coin, the privilege of substituting bars for money in one of its most important uses would be equivalent in a way to permitting the banks to increase arbitrarily the quantity of money in circulation.[3] (3) The imposition of a more rigorous governmental supervision of banks so as to insure a more effective enforcement of the law.[4] (4) Certain positive and direct measures to prevent the banks from unduly increasing their note issues. The decree of May 13, 1905 (art. 5) had pro-

[1] Decree of May 13, 1905. Leyes y Dispos., pp. 129-30.
[2] Ibid., pp. 129-31.
[3] Ibid., pp. 129-30.
[4] Ibid., pp. 131-32.

vided that no new concessions should be made for the establishment of banks of issue before December 31, 1909, and that those established after that date should not enjoy the immunities from taxation granted to those already established under the Act of March 19, 1897, and further, that they should be subject to a special tax in favor of the Federation of 2 per cent per annum upon the paid-up capital. The fact that the Executive had in his control the renewal of bank charters, and the authority to grant or deny applications for the increase or diminution of capital,[1] gave him the whip hand over the banks. An order of September 15, 1905 [2] tied to the authorization of further increases in capital the condition that banks desiring such authority should obligate themselves, during a certain period to be determined by the Finance Minister (and later fixed to terminate in 1909),[3] neither to increase their note circulation without a corresponding increase in their metallic reserves, nor to decrease their metallic reserves without decreasing to the same extent their note circulation.[4]

Two restrictions later placed upon banks of issue for the purpose of expediting the reform were: the order of August 28, 1906 forbidding banks to count the old coins that were being withdrawn as part of their legal reserves; and that of June 10, 1907 restricting the amount of fractional silver that could be counted as reserve money to 5 per cent of the total reserve requirements. The Finance Minister said in explanation of this latter order that the amounts of fractional silver held by banks in their reserves had been

[1] Art. 11, sec. 3 of Bank Act.

[2] Diario Official, Sept. 15, 1905.

[3] Enriquez Martinez Sobral, La Reforma Monetaria, p. 179.

[4] At a later date the Finance Minister said: "The apparent lack of elasticity in the bank-note circulation [from October 1905 to October 1906] was not to be wondered at, when one remembered that a large proportion of the banks recently pledged themselves to the administration not to increase their note circulation beyond certain limits without at the same time increasing in like degree their metallic reserves." Econ. Mex., XLIII, 1906, p. 248.

steadily increasing, and that the proportion generally exceeded 10 per cent and in some cases ran as high as 40 per cent of the reserve.[1]

Measures to Alleviate the Hardships Expected to Result to the Mining Interest from the Currency Reform

It does not fall within the province of this book to discuss in any detail the numerous measures adopted by the Government to alleviate the hardships to the mining industry, particularly to that of silver mining, which were expected to arise as the result of the closing of the Mexican mints to the free coinage of silver. From the beginning of the discussions concerning the reform the authorities had shown a disposition to protect these interests;[2] and upon the same date, March 25, 1905, that the Executive issued the decree creating the new monetary system, it issued a second decree concerning taxes and privileges in the mining industry,[3] which granted to those interested in silver and gold mining tax exemptions, tax reductions, and other special privileges.[4]

[1] Institutiones de Credito. Leyes y Circulares, etc., 1908, p. 79.

[2] Cf. supra, p. 489. [3] Leyes y Dispos., etc., pp. 57–62.

[4] This decree and certain subsequent ones, notably that of March 30, 1905, provided for:

"[1] A reduction in the taxes imposed upon the precious metals, and a graduation of those levied on silver according to its market value. . . .

[2] Exemption from taxes on certain parts of the productive process in the production of gold and silver. . . .

[3] Reduction of property taxes on gold and silver mines. . . .

[4] Exemption from taxes on machinery imported for use in the mining industry.

[5] Exemption from taxes on important materials necessary for the working of the mines.

[6] The establishment of a public service through which the mine owners would be permitted to present their [gold and silver] bars to the mint in the City of Mexico, in order that they might be sold abroad for the account of the interested parties, under the most favorable conditions possible, without any commission charge whatever for the service, so as to assure to the miners the largest possible part of the sale price of the bars. Sobral, La Reforma Monetaria, pp. 180–81. Cf. also Viollet, Le Problème de l'Argent, pp. 208–14.

The Reserve Fund

The last topic that calls for attention in the monetary decree of March 25, 1905 is the action taken concerning the mooted question of a reserve fund. While the Executive followed the recommendation of the Monetary Commission in not creating a reserve for immediate use in raising the peso to the new gold par, and in not assuming any obligation for the conversion of silver coins into gold in the future, it none the less took immediate steps for the creation of a reserve fund. Chapter 4 of the decree establishing the new monetary system [1] created a fund entitled *Fondo Regulador de la Circulacion Monetaria*, the fundamental object of which was to "facilitate the adaptation of the monetary circulation, as regards the quantity of money, to the exigencies of a stable foreign exchange." It was apparently with the purpose of giving the Executive a free hand that the object of the Fund was expressed in such vague and general terms.[2] The Fund was to be a trust fund, separate from other government funds, and was to be obtained from the following sources: (1) An initial contribution of P 10,000,000 from the public treasury, which might be raised to P 15,000,000 in case the Finance Minister should consider such an increase necessary. (2) Certain sums which the budget of expenditure would designate to cover losses from abrasion of coins as shown by the recoinage. (3) Seigniorage profits, of which at the beginning the most important would be those arising from the recoinage of a certain number of peso pieces into fractional coins. (4) Profits from foreign exchange operations. (5) Net profits on the coinage of pesos for exportation. (6) Other profits incidental to the regulation and maintenance of the Fund.

The Regulator Fund so constituted was to be divided into

[1] Leyes y Dispos., etc., pp. 52–53.
[2] Sobral, pp. 174–75.

two parts, one to be kept in Mexico and one abroad; the former to consist of "metallic money and exceptionally of gold or silver bars destined for coinage . . . to be held as a confidential deposit in the National Bank of Mexico or in some other establishment of first rank"; the latter to be deposited abroad in foreign banks or banking houses of high standing. To the Regulator Fund were to be charged only those expenses and losses which clearly arose from the deposit, movement, and location of the Fund, or from the foreign exchange operations in which the Fund was employed. All other expenses, such as salaries, coinage expenses, and the like, were to be charged to other funds.[1]

The Regulator Fund was not to be administered by the finance department of the Government, but by a special commission, which was created a few days later in the decree of April 3, 1905,[2] designated as the Commission on Exchange and Money (*Comision de Cambios y Moneda*). The Commission was an honorary one and consisted of ten members including the Finance Minister, two other government officials, and seven non-official members.[3] Appointments were for one year. Upon the Commission the decree conferred large powers, the exercise of some of which, however, were subject to the approval of the Finance Minister.[4] Subject to the broad provisions of the decree, the Commission's powers included the regulation of the quantities and denominations of the various kinds of money to be

[1] Leyes y Dispos., etc., pp. 52-53.

[2] Ibid., pp. 93-96.

[3] The ten members were: the Finance Minister, the Treasurer-General of the Federation, the Director of the Mint, a representative of the National Bank of Mexico, one representative each from two of the principal banks of Mexico, and four voters to be appointed by the Finance Minister. The non-official members need not be Mexican. Ibid., pp. 93-94.

[4] In general it may be said that the approval of the Finance Minister was required for operations involving substantial pecuniary responsibilities for the Government; or operations taking place partly in foreign countries, such as the deposit of part of the Fund abroad, the arrangements for the sale of foreign drafts on the Fund, and the sale abroad of gold and silver for the account of mine operators.

coined; the purchase of bullion for coinage; the establishment of federal offices for the exchange of money; the exchange of the new money for the old, and of fractional coins for pesos and *vice versa;* the placing of the new money in circulation; the administration of the Regulator Fund, including its formation, investment, and use for the stabilizing of exchange. Concerning the last named power the decree gave to the Commission authority to "employ the Fund for all banking operations, and operations in the exchange of money, which appear to be conducive to the stabilizing of foreign exchange rates and to the satisfying of the demands of the internal circulation." [1]

[1] A detailed statement of the powers of the Commission is contained in the decree. Leyes y Dispos., etc., pp. 94–95.

CHAPTER V

HOW THE PLAN WORKED

SUCH were the chief legislative and administrative measures adopted by the Mexican Government for the purpose of bringing about a relative contraction of the currency and, through the principle of scarcity value, of raising the gold value of the Mexican peso, and with it that of the new fractional coins, to a gold par of 75 centigrams of pure gold to the peso, and thereafter of maintaining it at that level. We are now in position to consider the question: How did the plan work?

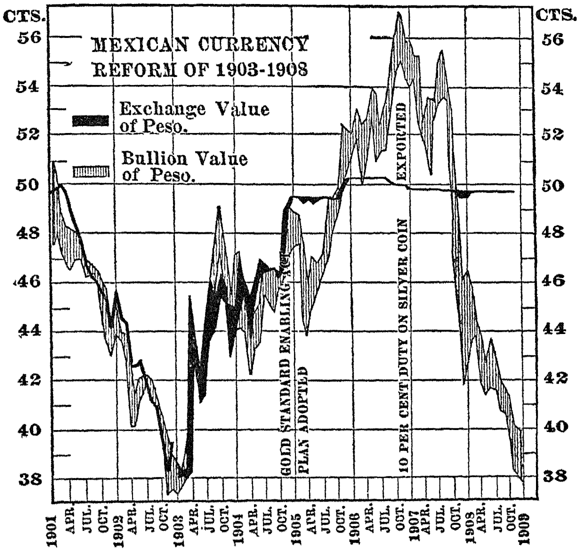
The monthly fluctuations in the exchange value and the bullion value of the Mexican peso for the period 1901 to 1908 are shown graphically on the following chart, the figures for which are given in Appendix A.[1]

It has previously been noted[2] that about the middle of November 1904, when the currency reform enabling Act of December 9 was first introduced in the Mexican Congress, there was evidence that the proposed reform would be favorably received by the business community both in Mexico and abroad, and that both Mexican exchange rates and the prices of Mexican securities reflected this attitude. A reference to the chart will show that from the spring of 1904 until August 1905 Mexican exchange on New York ruled almost continually at rates that gave the peso an appreciably higher value as money than as bullion; and that the exchange value of the peso, having risen in November and

[1] Infra, p. 549.

[2] Supra, pp. 523–24.

December 1904 from a value of approximately 46 cents United States currency to one of 49½ cents, partly under the influence of local conditions in Mexico but chiefly under that of a rising silver market, never again declined to its former level. In fact, even before the gold standard decree of March 18, 1905 was issued, the money value of the peso as measured by exchange rates seemed to have attained,



though insecurely, a 49½ cent level, and to have become fairly well divorced from bullion value.

As in the case of the Straits Settlements only a few months before,[1] the announcement of the plan to raise the value of the monetary unit by relative contraction of the currency led to a great influx of pesos into the country to take advantage of the anticipated rise in their value. This influx into Mexico began as early as November 16,

[1] Cf. supra, p. 404.

1904, and continued until January 1, 1905,[1] when a decree of November 23, 1904 placing a prohibitive duty of P10 per kilogram on the importation of Mexico pesos went into effect.[2] Not only was there a substantial influx of pesos from without Mexico, but a fact of even greater importance was that the usual large exportation of pesos from Mexico ceased almost entirely. The exports of Mexican pesos were P21 millions for the fiscal year 1902-03, P18.6 millions for 1903-04, and only P1.8 millions for the period July 1904 to June 1905.[3]

This influx of pesos into a market that was apparently already oversupplied would be expected to render more difficult the process of raising the value of the peso by relative contraction, and it doubtless had that tendency. But this effect was offset by several important forces, the chief of which were the following: (1) The great rise in the price of silver in the latter part of 1904, and the buoyant effect of this rise upon Mexico's silver industry. (2) The general business prosperity of Mexico at this time, and the rising confidence for the future — conditions which appear to have been favored by the prospects of a gold standard currency.[4]

[1] "On the announcement of the passing of a bill in Mexico placing the peso on a fixed basis the price [of Mexican pesos per ounce] rose to 27*d*., and all the pesos that were available here [in London] were at once shipped to Mexico to take advantage of the premium obtainable over their intrinsic value." Pixley and Abell Circular, December 31, 1904.

[2] Leyes y Dispos., etc., pp. 35-36.

[3] Hegemann, p. 163.

[4] The following quotations from two New York financial newspapers are apposite:

"[The announcement yesterday that the new Mexican currency system was to be put into effect May 1] was the subject of a great deal of discussion in the Street among men who have a financial interest in enterprises in Mexico, or who are familiar with the country. It was the universal opinion that within a few months at the longest, a large amount of American money will be invested in Mexico. . . . It is known that for some time American capitalists have simply been waiting for a definite announcement as to when the new monetary system would become effective before increasing their investments in Mexico or placing money there for the first time. It is the opinion of men here who are altogether familiar with Mexican affairs

This caused an increased demand for currency. (3) The restrictions imposed by the Government on the expansion of bank credit, particularly in the form of bank notes.[1] (4) The withdrawal from active commercial use by the National Bank of Mexico of the P10,000,000 representing the initial contribution of the Government to the Regulator Fund.[2] (5) The narrow margin between the bullion value of the peso for the period from November 1904 to February 1905 and the 50 cent gold par; and the resulting confidence in the early attainment of the par, leading people to hold pesos for the prospective rise in their value and to speculate for a fall in exchange. (6) The fact that the period during which the peso was held at an exchange value much above its bullion value was a short one, and one not subject to serious trade vicissitudes. The great rise in silver the latter part of 1905 placed strong supports under the relatively high exchange value of the peso before that value had been threatened by any serious business storms or trade depressions.

that not later than August or September, the increase in business in Mexico will become decidedly perceptible." Wall Street Summary, March 28, 1905.

"During a recent conversation in Washington Joaquin D. Casasus, Mexico's Ambassador to the United States, told the writer that fully $100,000,000 of new foreign capital has been invested in enterprises in Mexico during the year just closing. Of this amount over $60,000,000 represented money invested in the stock of five or six banks in Mexico City and several interior cities of the Republic, which have increased their capital during the year. The balance of the $100,000,000 represents investments in industrial, mining, and railroad securities in Mexico. During the last six months the earnings of the railroads in that country have increased materially, and the officials in charge are unanimous in ascribing these favorable results to the adoption of the new monetary system." New York News Bureau, December 14, 1905.

[1] Cf. supra, pp. 526–30.

[2] Conant, pp. 70 and 73.

Great Rise in the Gold Price of Silver

On April 7, 1905 the sharp decline in the London price of silver of the fore part of the year (see chart on page 535) reached its nadir with a price of $25\frac{7}{16}d.$ per ounce, giving the Mexican peso a bullion value of 43.8 cents. This was 24 days before the Mexican gold standard decree of March 25 was to go into effect, and nine days before the Mexican mints were to be closed to the free coinage of silver. The price of the white metal, under the influence of silver purchases for India and the depreciation of gold, now began one of the most pronounced upward movements in its history.[1] From $25\frac{7}{16}d.$ per ounce on April 7 it rose to $26\frac{1}{2}d.$ on April 17, the day after the closing of the Mexican mints, representing an advance of 4.2 per cent in 10 days. It hovered about that level for slightly over a month, and then began an irregular but pronounced upward movement which continued until November 17, 1906. The bullion par of the peso, *i.e.*, the price of silver per ounce at which its bullion content would be worth in London 75 centigrams of pure gold, was $28\frac{15}{16}d.$ As early as August 29, 1905 silver reached a point within 0.6 per cent of the bullion par; on October 21 it reached bullion par; and for the month of November it averaged 1.9 per cent above bullion par, reaching in that month a maximum of 4.8 per cent above. For every month of 1906 and every month of 1907 down to October the price of silver averaged well above bullion par, the average margin reaching 13 per cent for the month of November 1906, and the maximum margin reaching 14.5 per cent on the 17th of that month. The situation by months for the period 1905-07 is shown in the following table:

[1] For a discussion of this rise, its causes and effects, see Kemmerer, The Recent Rise in the Price of Silver and Some of its Monetary Consequences, Quart. Journ. Econ., XXVI, 1912, pp. 215-84, especially 215-39.

PERCENTAGE MARGIN OF HIGHEST AND AVERAGE PRICE OF SILVER IN LONDON ABOVE (OR BELOW) BULLION PAR OF MEXICAN DOLLAR

Month	1905		1906		1907	
	Highest	Average	Highest	Average	Highest	Average
January	*1.9	*3.4	4.6	4.1	12.2	9.9
February	*2.1	*3.0	6.5	5.3	11.1	10.1
March	*4.2	*7.4	5.2	3.3	10.9	8.2
April	*7.9	*9.6	5.7	3.6	5.5	4.7
May	*5.6	*7.8	8.5	7.1	7.6	5.4
June	*6.2	*6.9	7.6	4.5	7.4	6.8
July	*5.6	*6.2	5.2	4.2	10.4	8.5
August	*0.6	*3.2	7.0	5.5	11.5	9.5
September	*0.6	*1.4	9.8	8.9	9.1	8.1
October	0.0	*1.0	12.6	11.2	6.8	*0.2
November	4.8	1.9	14.5	13.0	*3.0	*6.1
December	4.8	3.7	12.0	10.7	*7.5	*9.4
Year	4.8	*3.8	14.5	6.8	12.2	4.9

*Below.

How the Mexican Government Met the Emergency and Incidentally Placed the Currency System upon a Strict Gold Standard

While this phenomenal advance in the price of silver came as a surprise to the Mexican authorities, it cannot be said that they were unprepared to meet it. The thoroughness with which the Monetary Commission had gone into the entire subject of the monetary reform had not stopped short of formulating, though rather loosely, tentative plans by which to meet such an emergency, improbable though it seemed. Moreover, the sharp rise in silver the latter part of 1905 had been a further warning to the authorities to be prepared for such a contingency. The majority of the fifth subcommission had said in their report which was adopted as the report of the Commission:

"The fourth subcommission, taking as its base the average price of the white metal for the years 1893 to 1902 inclusive, has supported with abundance of sound reasons the expediency of adopting a ratio not below 1 to 36 nor above 1 to 32. No one combatted this opinion except Mr. José de Landero y Cos, to whom it appeared that not even the last of these ratios offered a sufficient margin to assure the maintenance of the new money at a value above its value as mere bullion, since the rise in the price of silver which had characterized the closing months of the present year[1] [1903], gave reason to fear because of its unusual firmness, that it would not only be maintained, but even accentuated, until it should approach or even reach the proposed ratio of 1 to 32."[2]

Referring to the question as to what ought to be done — if, subsequent to the putting into operation of the monetary reform measures, the gold price of silver were to rise to a point at which the bullion value of the new peso should become equal to, or even exceed, legal parity — the fifth subcommission said:

"Such a contingency cannot be judged impossible, when one considers the surprises which the constant fluctuations in silver have so often given to those who are best informed and most foresighted on the subject. For the solution of the problem there would be only two possible courses. Either to alter the legal parity . . . or to go frankly and openly to a gold standard with the circulation of gold coin. Since the inconveniences of the former course leapt before us with all their sinister consequences, we accepted without disagreement or hesitation the second plan, making it the twelfth base in the plan of reform."[3]

This base recommended that under such a contingency the Government should immediately demonetize the silver

[1] See chart, p. 535.
[2] Com. Mon. Mex., Actas, etc., p. 197.
[3] Ibid., p. 200.

peso, and introduce into the monetary system the gold standard with free coinage of gold and gold in circulation.[1]

On November 16, 1904 Finance Minister Limantour in submitting to Congress the proposed enabling Act said:

"For some months exchange rates on New York have represented a gold value to the peso of from 46 to 47 cents; although the price of bar silver has been relatively lower. Since, on the other hand, the tendencies of the white metal are not in the direction of its being much dearer, for there is no prospect either that its production will be diminished, or that the demand for it will be suddenly increased in any strong proportions, the present margin between the bullion value of the peso and the money value which we are undertaking to give it in our new monetary system, is sufficiently ample to remove the fear, at least for some time, that serious disturbances may arise from an advance in the bullion value of the peso above its legal parity. On the other hand, the margin is not so large as to inspire doubts that the peso may not be able to be raised without difficulty to the legal gold parity."[2]

Despite this confidence, the Finance Minister had taken precautionary measures; for the bill which he submitted to Congress in November 1904, and which later became the Gold-Standard Enabling Act, gave the Executive authority "to permit the legal circulation for a limited period of the gold coins of other nations, fixing their value in Mexican money, in case the price of standard silver per ounce in London should rise above $28\frac{1}{2}d.$," the bullion par being $28\frac{15}{16}d.$; and "to demonetize coins which in his judgment should be retired from circulation"; to have gold coined when he saw fit; and "to modify civil and mercantile legislation in all matters connected with loans and the payments of money."

[1] Ibid., p. 203.
[2] Leyes y Dispos., etc., pp. 24–25.

Measures to Protect the Monetary Circulation. With the high profits realizable from the exportation of silver pesos, which the bullion values of the peso after October 1905 suggest, one would have expected bullion dealers everywhere to collect pesos and to export them in large quantities. To prevent this the Commission on Exchange and Money wisely undertook to keep in its own control the matter of exporting pesos. Its problem and how it solved it may best be told in the words of its own admirable report.[1]

"The Commission immediately decided to take advantage of such a favorable conjuncture to undertake the task of demonetizing the Mexican peso, converting into gold the silver which it contained. . . . In order to accomplish this end it would be necessary to proceed very rapidly, since it was impossible to predict how long the advance in silver would continue; and at the same time with great caution, since it is known that the silver market is exceedingly sensitive, and the offer of silver even by a very small amount in excess of the demands of the day is sufficient to depress the market to a considerable degree. Without precipitation, therefore, but with inviolable firmness, following the fluctuations of the market closely and with anxious interest, the Commission began to realize upon the pesos which it held in the Regulator Fund. When it had disposed of these at remunerative prices, which happened soon, it made an arrangement with the banks according to which they undertook to turn over to the Commission their cash balances of pesos upon condition that they should realize upon them in London without loss, notwithstanding the great diversity of places in which the money was gathered.

"It was the invariable rule of the Commission in the numerous operations of this kind which it undertook, to turn over all or nearly all the margin of profit which it realized to the banks which furnished the pesos for exporta-

[1] Memoria de la Comision de Cambios y Moneda, que Comprende el Periodo Transcurrido de lo de Mayo de 1905 à 30 de Junio de 1909, pp. 12–14.

tion, since it appeared that by proceeding in this way it not only complied with the demands of justice but best accomplished the purpose for which the Commission was created. That purpose was not to secure profit, but to contribute to the establishment and maintenance of the monetary circulation of the Republic upon sound and stable bases.

"Another object pursued at the same time by the Commission in its conduct of this affair was to prevent banks and individuals from becoming interested in undertaking directly operations for the exportation of pesos. To this end the services of the Commission were made essentially gratuitous. Thus the Commission prevented disturbances in the silver market which without doubt would have taken place if the offerings of Mexico had been multiplied in a disorderly manner and had not been turned into one channel, attention always being given to the circumstances of the moment. The Commission furthermore enjoyed facilities for conducting the business quickly, effectively, and cheaply, which were not available to all exporters."

In this manner the Commission exported from November 17, 1905 to September 24, 1907 the important sum of P 60,727,500, from which it was able to realize upon all but P 2,710,000.[1]

Notwithstanding all the efforts which have been alluded to, for conserving the Commission's control over the exportation of pesos, it continually feared that a time would arrive when its control would disappear, because it was certain that if the high price of silver should persist, the spirit of gain and of speculation would induce many to undertake operations on their own account. The danger then would consist not only in the disturbances which would thereby be caused in the market for the purchase of silver, but also in the rapid retirement from circulation in the Republic of

[1] Before this latter sum could be realized upon the price of silver declined so far that it became desirable for the Commission to have the coins returned to Mexico.

large sums of pesos, thus producing quickly a dangerous contraction in the currency, since individuals would not find it to their interest to follow the invariable practice of the Commission of returning to the circulation in the form of gold the equivalent of the silver coins withdrawn.

When in October and November 1906 the price of silver rose to an average of 11.2 per cent and 13.0 per cent, respectively, above bullion par, the exportation of silver pesos became so profitable "that commercial people of every class and persons not engaged in commerce undertook their exportation." [1] Figures cited by the Commission show that nearly sixteen million pesos were exported by private parties prior to November 19, 1906.[2]

Now we find Mexico's currency problem reversed. It is no longer the problem of creating a scarcity of money so as to raise the value of the peso to the gold par of 75 centigrams of pure gold, but the problem of preventing a currency scarcity and of keeping the peso down to the gold par for purposes of circulation. On every side fears were expressed lest the country would be denuded of its currency supply. The situation was made more serious by the facts that (1) at the time the pesos were being exported subsidiary coins were being withdrawn from circulation and recoined, also minor coins of nickel and copper; and that (2) there were in force strict limitations upon additional issues of bank notes which had been imposed to prevent an increase of bank-note circulation from interfering with the "relative contraction of the currency."

On November 19, 1906 a ten per cent duty was imposed upon the face value of silver coins exported, with the proviso that exporters would be exempted from the tax if within thirty days of the date of shipment they should turn over to the Commission for gratuitous coinage gold bars or foreign gold coins equivalent in value at the legal parity to

[1] Hegemann, pp. 173–74.

[2] Memoria, etc., p. 15.

the pesos exported. There were exported, in accordance with the provisions of this law, down to the close of the fiscal year 1907–08, P 8,264,447,[1] which, added to the net exportations made by the Commission for which gold was returned, total over P 66,000,000.[2]

The next step was to make every effort to expedite the coinage of all new kinds of Mexican money, gold, silver, nickel, and copper. To this end not only was the Mexican mint worked to its full capacity, but the mints of other countries [3] were also employed under the supervision of representatives of the Mexican Government. The amount coined at foreign mints was P 41,610,123, and at the Mexican mint P 86,345,647, making a total coinage down to June 30, 1909 of P 127,955,770 and representing 86.5 per cent of the total metallic money of the country. To take the place of the pesos which were being exported the Government coined a large number of 50-cent pieces,[4] which were highly popular coins and not of sufficient bullion value to be exportable.

Two measures adopted in 1905, before the rise in the price of silver had resulted in the exportation of much silver coin, proved helpful in the effort to provide promptly an adequate gold circulation.

The first was an Act to encourage the keeping of domestically produced gold at home. Mexico is an important gold-producing country (ranking only after South Africa, the United States, and Russia in 1908), and fortunately her product was increasing at the time the monetary reform

[1] Ibid., p. 14.

[2] On June 30, 1909 it was officially estimated that there was still in Mexico about twenty million of the old silver pesos out of a total metallic monetary stock of 147,950,242 pesos. Ibid., p. 17.

[3] The foreign mints employed were those of Birmingham, England; Philadelphia (which coined 30,000,000 pesos of gold coin); New Orleans; Denver; and San Francisco. Detailed figures for the coinage will be found in Memoria, etc., App. No. 7.

[4] Out of a total new silver coinage of P 42,728,543, P 26,830,619 or 62.8 per cent consisted of 50-cent pieces. Ibid.

was being effected.[1] An Act of June 19, 1905 reduced the stamp tax upon the value of bars of gold (as well as of silver) refined to a fineness of .999 or more, from 2½ per cent to 1½ per cent.[2] It is interesting to note that domestic gold to the value of over P 52,000,000 was purchased by the Commission in the form of bars down to the close of the fiscal year 1909.[3]

The second measure was the adoption of the temporary expedient of issuing gold certificates against gold bullion in process of coinage. These certificates were authorized in the decree of December 22, 1905,[4] and their principal characteristics are well summarized by Sobral as follows:

The certificates were issuable "in exchange for gold bars or foreign gold coins received for coinage; or in exchange for silver pesos received for sale, the proceeds of which were to be turned into gold. They were payable to bearer at sight, but at the request of the interested parties might be made payable to order. Certificates were issued in denominations of a thousand pesos or multiples thereof, except when they were made payable to order; but in no case in denominations of less than a thousand pesos. They were redeemable

[1] According to the estimates of the Director of the United States Mint, Mexico's annual gold product in terms of United States money at this time was as follows: 1905, $16,107,100; 1906, $18,534,700; 1907, $18,681,100; and 1908, $22,371,200.

[2] Cf. Memoria, etc., p. 20.

[3] Ibid., Appendix 9.

[4] "In accordance with the wording of the decree the Commission must at all times keep in the National Bank gold to the amount of the gold certificates issued. This it could do by means of the money in the Regulator Fund. Doubtless the Commission felt secure against a crisis, since the amount of the certificates issued was already held in the form of United States gold coin, and the Executive had authority from the Gold-Standard Act to make foreign gold money legal tender at any time. For national reasons it was decided not to adopt such a course unless necessary. (Cf. Memoria, etc., p. 16.) In case of the sudden presentation of gold certificates, however, redemption might be made in gold coin of the neighboring Republic, which enjoyed a good reputation in Mexico, and which, if made a legal means of payment, could be substituted for the new Mexican peso, since the American dollar was worth almost exactly two Mexican pesos." Hegemen, pp. 172–73.

on demand, the Commission having the option to redeem in Mexican gold coin or in foreign gold coin; and the Commission kept a deposit in gold bars as a guaranty fund. Banks were authorized to count certificates as part of their reserves."[1] Although legally free coinage of gold did not exist, this issue of certificates in exchange for gold bullion amounted to nearly the same thing; and as a matter of fact all gold presented was freely coined by the Commission.

The restrictions upon the bank-note circulation were relaxed; and the total circulation increased from P 89.5 millions August 31, 1905 to P 96.0 millions November 30, 1906. The National Bank of Mexico alone increased its circulation from P 25.0 millions to P 34.0 millions.[2]

Final Results

The measures just described proved effective. They provided the mechanism by which the great but temporary rise in the price of silver during 1905–07 carried Mexico quickly and unexpectedly to the gold standard, yielded a net profit of P 8 millions,[3] solved the vexed problem of a gold reserve, eliminated the necessity of the gold-exchange standard, and transferred the country's stock of metallic money in a little over three years' time from one consisting almost entirely of silver coins to one in which P 83 millions[4] out of a total of P 148 millions were gold, and in which P 128 millions represented new coins.[5]

The story of the subsequent breakdown of this carefully constructed gold standard during Mexico's recent unfortunate years of revolution does not fall within the province of this paper, nor are the materials yet available to make possible an account of it that would be of any scientific value.

[1] Sobral, pp. 191–92.
[2] Economista Mexicano, Sept. 30, 1905, p. 589, and Jan. 5, 1907, p. 304.
[3] Memoria, etc., Appendix, p. 11. [4] Ibid., pp. 14–16. [5] Ibid., p. 7.

APPENDIX A

Exchange Rates in the City of Mexico on New York, Demand Bank Paper, Number of United States Cents to a Mexican Peso[1]

	1903			1904			1905			1906			1907			1908		
	High	Low	Mean	High	Low	Mean	High	Low	Mean	High	Low	Mean	High	Low	Mean	High	Low	Mean
Jan. .	38.67	38.02	38.34½	45.15	43.98	44.56½	49.50	49.08	49.29	50.25	50.25	50.25	49.85	49.85	49.85	49.75	49.50	49.62½
Feb. .	38.27	38.13	38.20	47.34	44.89	46.11½	49.50	49.44	49.47	50.28	50.25	50.25½	49.85	49.85	49.85	49.75	49.70	49.72½
Mar. .	38.31	37.91	38.11	46.08	45.61	45.84½	49.50	49.44	49.47	50.28	50.28	50.26	49.85	49.85	49.85	49.75	49.70	49.72½
Apr. .	45.45	38.20	41.82½	45.35	43.29	44.32	49.50	49.41	49.45½	50.28	50.28	50.28	49.85	49.82	49.83½	49.75	49.70	49.72½
May .	43.86	42.69	43.27½	46.03	44.94	45.48½	49.50	49.44	49.47	50.28	50.28	50.28	49.87	49.80	49.83½	49.77	49.70	49.73½
June .	42.28	41.07	41.67½	46.95	46.08	46.51½	49.50	49.08	49.29	50.28	50.28	50.28	49.82	49.82	49.82	49.77	49.72	49.74½
July .	42.44	41.28	41.86	46.67	46.30	46.48½	49.53	49.08	49.30½	50.28	50.28	50.28	49.82	49.77	49.79½	49.77	49.72	49.74½
Aug. .	46.19	43.48	44.83½	46.57	46.35	46.46	49.52	49.44	49.48	50.28	50.26	50.27	49.82	49.77	49.79½	49.77	49.70	49.73½
Sept. .	45.20	44.05	44.62½	46.57	46.51	46.54	49.48	49.42	49.45	50.50	50.15	50.32	49.82	49.77	49.79½	49.75	49.70	49.72½
Oct. .	46.30	45.30	45.80	46.87	46.03	46.45	49.45	49.42	49.43½	50.50	50.50	50.50	49.82	49.70	49.76	49.75	49.70	49.72½
Nov. .	45.82	45.09	45.45½	48.96	46.35	47.65½	50.00	49.47	49.73½	50.50	50.50	50.50	49.75	49.50	49.62½	49.75	49.70	49.72½
Dec. .	44.24	42.94	43.59	49.47	49.08	49.27½	50.31	49.97	50.14	50.50	49.85	50.17	49.75	49.50	49.62½	49.75	49.70	49.72½
Year .	46.30	37.91	42.10½	49.08	43.29	46.18½	50.31	49.08	49.69½	50.50	49.85	50.17	49.87	49.50	49.68½	49.77	49.50	49.63½

[1] These monthly rates were prepared from a table of weekly rates compiled for the author by the National Bank of Mexico from its own records. They are plotted on the chart on page 535 of the text.

APPENDIX B

THE MEXICAN CURRENCY REFORM

Principal References Cited

ANDREW, A. PIATT. The End of the Mexican Dollar. Quarterly Journal of Economics, XVIII, 1904, pp. 321–56.

British Diplomatic and Consular Reports. Annual. London: British Blue Book.

CASASUS, JOAQUIN D. La Question de l'Argent au Mexique. Materiaux Presentes par Joaquin D. Casasus, Delegué du Gouvernement Mexicain à la Conférence Internationale Monetaire de Bruxelles. Paris, 1892.

——. La Reforma Monetaria en Mexico. Mexico City: Imprenta de Hull, 1905.

Comision de Cambios Internationales de la Republica Mexicana. Memorandum of Conference between Delegations for the United States, China, Mexico, and Representatives of Great Britain, June 1903. Mexico City: Government, 1903.

Comision Monetaria, Mexico. Actas de las Juntas Generales y Documentos a Ellas Anexos. Mexico City: Government, 1904.

——. Datos Complementarios para el Estudio de la Cuestion Monetaria en Mexico. Mexico City: Government, 1903.

——. Datos para el Estudio de la Cuestion Monetaria en Mexico. Mexico City: Government, 1903.

——. Datos sobre Rentas de Fincas Urbanas en la Ciudad de Mexico. Mexico City: Government, 1903.

——. Estadistica Bancaria. Mexico City: Government, 1903.

CONANT, CHARLES A. The Banking System of Mexico. National Monetary Commission. 61st Congress, 2d Sess., Senate Document, No. 493. Washington: Superintendent of Documents, 1910.

——. Influence of Falling Exchange upon the Returns Received for National Products. Argument Submitted by Messrs. Charles A. Conant, Jeremiah W. Jenks, and Edward Brush to the Monetary Commission of the Republic of Mexico. London: A. E. Bailey, 1903.

Datos Estadísticos Preparados por la Secretaria de Hacienda y Credito Publico Especialmente para el Estudio de la Cuestion Monetaria. Mexico City: Government, 1903.

Diario Oficial, Mexico. Government. *Passim.*

Director of the Mint. Annual Reports. Washington: Superintendent of Documents.

Economista Mexicano; Seminario de Asuntos Economicos y Estadísticos. City of Mexico: Tipografia de "El Gran Libro." *Passim.*

FAVRE, JEAN. Les Banques au Mexique, Organisation et Developpement. Paris: Marcel Rivière, 1907.

GAINES, MORRILL W. Effects of the Silver Standard in Mexico. Yale Review, XII, 1903, pp. 276–89.

——. The Price of Silver. Yale Review, XIV, 1905, pp. 18–37.

——. The Problem of Monetary Reform in Mexico — A Suggestion. Yale Review, XII, 1903, pp. 346–59.

GLONER, PROSPER. Les Finances de États Unis Mexicaines. Berlin: Puttkamer & Mühlbrecht, 1896.

HEGEMANN, WERNER. Mexikos Übergang zur Goldwährung. Stuttgart und Berlin: J. G. Cotta'sche Buchhandlung Nachfolger, 1908.

International Bureau of the American Republics. Mexico, Geographical Sketch, Natural Resources, Laws, Economic Conditions, Actual Development, Prospects of Future Growth, 1904. 58th Congress, 3d Sess., House Documents, LXVI, No. 145, Part 5. Washington: Superintendent of Documents, 1904.

International Monetary Conference Held in Paris in 1878. Report. Washington: Superintendent of Documents, 1879.

JOHNSON, JOSEPH FRENCH. Money and Currency. Boston: Ginn & Co., 1906.

KAERGER, KARL. Landwirtschaft und Kolonisation in Spanischen Amerika. 2 Volumes. Leipzig: Duncker & Humblot, 1901.

KEMMERER, E. W. The Recent Rise in the Price of Silver and Some of its Monetary Consequences. Quarterly Journal of Economics, XXVI, 1912, pp. 215–84.

Leyes y Disposiciones Relativas a la Reforma Monetaria. Mexico City: Government, 1906.

Memoria de la Comision de Cambios y Moneda, que Comprende el periodo Transcurrido de 1 de Mayo de 1905 á 30 de Junio de 1909. Mexico City: Government, 1909.

Mexico and the Silver Problem. The Economist, London, December 13, 1902, pp. 1930–31.

Money and Prices in Foreign Countries. Special Consular Report,

XIII, Part I. 54th Congress, 2d Sess., House Documents, No. 25.

NASSE, E. Das Sinken der Warenpreise während der letzten fünfzehn Jahre. Jahrbuch für Nationaloekonomie und Statistik, neue Folge, Bd. 17, 1888, pp. 50–66 and 129–81.

ROMERO, MATIAS. Mexico and the United States. New York: G. P. Putnam's Sons, 1898.

SOBRAL, ENRIQUE MARTINEZ. La Reforma Monetaria. 2 Edicion. Mexico City: Tipografia de la Oficina Impresora de Estampillas, 1910.

SUMNER, W. J. The Spanish Dollar and the Colonial Shilling. American Historical Review, III, 1898, pp. 617–19.

United States Consular Reports. Mexico. Washington: Superintendent of Documents. *Passim.*

VIOLLET, EUGÈNE. Le Probleme de l'Argent et l'Etalon d'Or au Mexique. Paris: Giard et Brière, 1907.

WEYL, WALTER E. Labor Conditions in Mexico. Bulletin of the Department of Labor, No. 38, January 1902. Washington: Superintendent of Documents.

INDEX

Printed in the United States of America.

THE following pages contain advertisements of books by the same author or on kindred subjects.